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Coping with Imprisonment: Testing the Special Sensitivity Hypothesis for White-Collar Offenders

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ABSTRACT

The following study uses nationally representative prison data, based on inmates' self-reports, to test two competing theories of how white-collar offenders experience prison. The first perspective, referred to as the special sensitivity hypothesis, is based on the idea that the social and demographic background characteristics make white-collar offenders more susceptible to the pains of imprisonment than other inmates. Conversely, the second perspective, referred to as the special resiliency hypothesis, is based on the notion that these same background characteristics may work to reduce the pains of imprisonment for white-collar offenders. Multilevel and single-level regression models are used to estimate the effect of white-collar inmate status—which include both offender- and offense-based characteristics—on several indicators of prison adjustment, including victimization, prison conduct, psychological adjustment, and participation in prison programs. The current study finds partial support for the special resiliency hypothesis but limited support for the special sensitivity hypothesis. The results for each outcome are discussed in reference to both theoretical and practical implications. The study's limitations are also addressed and directions for future research on incarcerated white-collar offenders are given.

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CHAPTER 1

STUDYING WHITE-COLLAR OFFENDERS IN PRISON

Although it is not widely known, the number of people incarcerated for white-collar offenses in the United States has been steadily rising for the past two decades. There are now more white-collar offenders incarcerated in U.S. prisons than ever before, and public support for the prosecution and imprisonment of white-collar criminals is on the rise (Cullen, Hartman, & Jonson, 2008; Unnever, Benson, & Cullen, 2008). According to some estimates, approximately one in two offenders convicted of a white-collar offense will serve at least some time in prison (Higgins, 1999). Similar trends have been documented by the United States Sentencing Commission (1998, 2003a, 2003b, 2008), which reports an increase in the rate of white-collar offenders sentenced to federal prison. For example, between 1997 and 2009, the incarceration rate for fraud rose from 64.8 per 100,000 to 74.9. During this same time period, increased rates were also reported for other white-collar crimes, including tax violations (from 45.6 to 58.8), forgery and counterfeiting (65.1 to 70.0), food and drug offenses (44.4 to 52.4), and bribery offenses (58.9 to 79.3).

In the same way, there is evidence to suggest that prison sentences for white-collar criminals have become more punitive over time. A well-known example is the case of Bernard Madoff, who in 2009 was convicted of mass fraud for orchestrating the largest Ponzi scheme in history. Over a 20-year period, Madoff defrauded his clients out of approximately $65 billion, for which he received a 150-year sentence in a federal prison. Similarly, Scott Eaton, former Athletic Director of Northern Kentucky University, received a 10-year sentence for embezzling over $300,000 of school funds for personal use. Most recently, former New Orleans Mayor Ray Nagin was sentenced to 10 years in prison for bribery, money laundering, and other corruption

during his tenure in office. And while such cases are not typical, the average sentence length has increased for most white-collar offenses in recent decades. Since 1998, for example, the mean sentence length for fraud has nearly doubled—from 12.9 months in 1998 to 26 months in 2013 (United States Sentencing Commission, 1998, 2013). Likewise, mean sentence lengths have increased for forgery and counterfeiting (from 10.7 to 12 months), tax violations (from 8.5 to 14 months), and bribery offenses (from 12.7 to 22 months).

Thus, most recent statistics on white-collar crime indicate that more white-collar offenders are being incarcerated, and for longer periods of time than in years past (Stadler, Benson, & Cullen, 2013). However, the people who commit white-collar offenses tend to come from dramatically different social backgrounds and tend to have much less experience with the criminal justice system than the people who commit ordinary street crimes (Benson & Kerley, 2000; Benson & Simpson, 2015; Weisburd, Wheeler, Waring, & Bode, 1991). Research by Wheeler and colleagues (1988a, 1988b), for example, suggests that white-collar offenders are, on average, middle-age, white males, who are better-educated and more likely to be steadily employed than common criminals. Studies have also shown that convicted white-collar offenders are less likely to have prior arrests, and tend to have criminal careers that differ from those convicted of common offenses—especially with respect to the frequency of offending (Benson & Moore, 1992). In addition, research indicates that white-collar offenders do not see their actions as criminal; rather, interviews with convicted white-collar offenders suggest they go at lengths to justify or neutralize their behavior, so as to deny their "guilty mind" of a criminal identity (Benson, 1985; Stadler & Benson, 2012).

In light of these differences, there is reason to believe that white-collar offenders may react to imprisonment in ways that are dramatically different from ordinary street offenders.

Indeed, there are two schools of thought on how white-collar offenders respond to incarceration. On the one hand, some have argued that white-collar offenders, by virtue of their background and lack of experience with the criminal justice system, will experience greater difficulty in adapting to prison life than other inmates. Referred to as the *special sensitivity hypothesis*, this perspective is based on the notion that the transition from a life of freedom and privilege to one of strict regulation and material deprivation may be particularly shocking to newly incarcerated white-collar inmates. As an example, media sources reported that when Bernard Madoff began his prison sentence, his stress levels were so severe that he broke out into hives and experienced several other skin maladies soon after (*New York Post,* 2010). Furthermore, advocates of this position argue that white-collar offenders have "more to lose" than other offenders by going to prison, and that the stigmatization experienced as a result of job loss, professional licenses, and reputation within the community is punishment enough (Benson, 1984; Mann, Wheeler, & Sarat, 1988b; Pollack & Smith, 1983; Renfrew, 1977).

On the other hand, there are those who believe that the social and background characteristics of white-collar offenders may serve as an asset in prison. Proponents of this position, referred to here as the *special resiliency hypothesis*, contend that white-collar offenders may be better-equipped with the personal and social capital necessary for the challenges and conditions of institutional life (Benson & Cullen, 1988; Stadler, Benson, & Cullen, 2013). As previously mentioned, they almost always are more educated than the average inmate. Additionally, they may have a more established sense of identity, stronger ties to individuals outside the prison—such as spouses or children—as well as a greater commitment to traditional values than regular offenders. Importantly, such factors have been previously linked to reduced stress in the prison setting (Clemmer, 1958; Irwin, 1970; Porporino & Zamble, 1984;

Wooldredge, 1999). However, with the exception of anecdotal reports (Benson & Cullen, 1988; Mann, Wheeler, & Sarat, 1988b; Pollack & Smith, 1983; Renfrew, 1977) and a few studies with small samples (Payne, 2003; Stadler, Cullen & Benson, 2013), the empirical status of the two perspectives has not been rigorously tested. The present study provides such a test using a large sample of nationally representative data from the Survey of Inmates in State and Federal Correctional Facilities, 2004.

The remainder of this chapter is divided into two sections. The first section discusses how white-collar crime has been conceptualized in the past, with a specific focus on the theoretical and methodological issues that arise as a result of the different approaches to defining this concept. The second section reviews the literature on incarcerated white-collar offenders with respect to the special sensitivity and special resiliency perspectives. In Chapter 2, the literature on predictors of prison adjustment is presented, following the pains of imprisonment perspective as well as the importation and deprivation models commonly used to examine the prison experience (Harer & Steffensmeir, 1996; Sykes, 1958; Wooldredge, 1999). Chapter 3 describes the study's methodology, including the data and sample, a description of all measures, as well as the statistical analyses that are used, while Chapter 4 presents results from the descriptive and multivariate analyses. The fifth and final chapter discusses the study's findings in terms of both theoretical and practical application. The shortcomings of the study and directions for future research are also discussed here.

DEFINING WHITE-COLLAR CRIME

The concept of white-collar crime has a long and controversial history. Issues regarding its defining features or characteristics have been heavily debated among criminologists—so much so that no widespread definition currently exists (Benson & Simpson, 2015; Braithwaite,

1985; Edelhertz, 1970; Felson, 2002; Geis, 1996; Hirschi & Gottfredson, 1987; Shapiro, 1990; Sutherland, 1983). The difficulties associated with defining white-collar crime, in part, stem from the fact that it is conceptually different from other types of crime. Specifically, white-collar crime is not an official, legally recognized category; rather, it is a sociological construct that does not clearly delineate what actions or activities should be included its definition (Benson, Kennedy, & Logan, 2014).

Some scholars, for example, argue that the defining features of white-collar crime should be based on the characteristics of the offender (Sutherland, 1983); others maintain that the characteristics of the actual offenses are more useful for studying and understanding white-collar crime (Edelhertz, 1970). Depending on which definition is used, the measurement of white-collar crime is affected—in particular, the use of different definitions affects who is identified as a white-collar offender and what conclusions can be drawn about white-collar offending. The following paragraphs provide an overview of the debate regarding how white-collar crime should be defined and measured. It does so by reviewing different definitions of white-collar crime and addressing the conceptual and methodological issues associated with each perspective. Also discussed in this section are the limitations of the available data from which generalizations regarding white-collar crime can be made, especially as they pertain to incarcerated white-collar offenders.

Offender-Based Perspectives

The most well-known definition of white-collar crime was put forth by Edwin Sutherland (1949/1983), who saw it as a crime committed by a person of respectability and high social status in the course of his occupation. Such offenders, Sutherland noted, were to be differentiated from persons of low social status, who violate the laws designed to regulate their

occupational activity, as well as those of high social status, who commit crimes unrelated to their occupation. With its emphasis on the offender's social status and reputation, Sutherland's definition is the most well-known and influential example of the offender-based approach to understanding white-collar crime (Benson & Simpson, 2015). In addition, Sutherland argued that civil and administrative violations should also be counted as white-collar crimes.

From the beginning, Sutherland's definition elicited controversy among legal scholars, who chided him for including violations that were not considered criminal, such as decisions against companies by administrative and regulatory agencies (Tappan, 1947). That is to say, Sutherland was criticized by members of the legal community, who argued that only acts punishable by criminal law constitute true crime. Sutherland responded by noting that many civil law proceedings mirror those of criminal law, and that their exclusion from analyses arbitrarily limits the range of white-collar crimes.

Scholars also questioned whether Sutherland's emphasis on the offender's social status should be a central feature of white-collar crime. Indeed, while his intention was to shed light on upper world impropriety, which was oftentimes omitted from analyses due to class-biased research, Sutherland's definition poses an array of measurement challenges. As Benson and Simpson (2015) pointed out, "the main problem in using social status as a defining element of crime is that it cannot then be used as an explanatory variable because it is not allowed to vary independently of crime" (p. 9). As such, it prevents researchers from assessing how an individual's social status affects the type and seriousness of white-collar offenses they commit. So, while fraud may be committed by both a corporate executive and an entry-level employee, only the former would fit the offender-based definition of white-collar crime. In other words, the opportunity structures that facilitate criminal activity for executive employees and CEOs differ

dramatically from those working in entry-level positions, and focusing solely on social status completely omits white-collar-type crimes committed by the latter group from analyses. Additionally, adopting an offender-based approach makes it difficult to use official records and data, since most sources do not have the information needed to classify people on the basis of their respectability or social status.

Offense-Based Perspectives

In order to remedy the issues associated with using offender-based approaches, scholars began to examine white-collar crime in a status-neutral fashion, with a primary focus on the illegal nature of the act. Herbert Edelhertz (1970) was the first scholar to embrace this perspective, commonly referred to as the offense-based approach. He proposed that white-collar crime be defined as "illegal acts committed by non-physical means and by concealment or guile to obtain money or property, to avoid payment or loss of money or property, or to obtain business or personal advantage" (Pp. 19-20). As opposed to offender-based definitions, then, the offense-based perspective defines white-collar crime according to the means by which an offense is carried out—that is, in a non-physical, deceptive manner. Similarly, Shapiro (1990, p. 17) posited that a defining feature of white-collar crime is the violation of abuse or trust, and that the notion of white-collar crime is best understood when the characteristics of offenders are separated from their transgressions. Provocatively, she argued that researchers should focus on "collaring the crime instead of the criminal."

Offense-based approaches to studying white-collar crime have gained popularity among scholars for a number of reasons. First, as Benson and Simpson (2015) explain, because offense-based definitions make no mention of the actor's social status or the social location of the crime, they are free to vary independently of the act and can therefore be used as predictor variables. In

other words, offense-based definitions allow researchers to examine variation in how one's social status influences the nature of—as well as the social and legal response to—the white-collar offense. Second, researchers are able to compare and determine whether white-collar offenses committed during the course of one's occupation differ from offenses committed in other settings. Lastly, offense-based definitions allow researchers to more easily use official data sources when drawing samples of white-collar offenders, since they only need to identify the individuals whose offenses meet the established criteria (e.g., non-physical crimes based on deception).

While the offense-based perspective has been accepted by many researchers, other scholars take issue with the definition, which they view as missing or ignoring some of the most important characteristics of white-collar crime. For instance, it has been argued that offense-based definitions end up focusing on relatively trivial crimes committed by ordinary people who somehow found their way into the criminal justice system. This approach leads researchers to neglect the role of the powerful corporations and executives that originally piqued Sutherland's interest (Braithwaite, 1985; Geis, 1996; Wheeler et al., 1988a). For example, according to the offense-based perspective, the alcoholic who cons his friend out of a bottle of whiskey technically meets the criteria for a white-collar offender (Benson & Simpson, 2015). In the same way, some scholars posit that white-collar crimes constitute nothing more than "crimes of specialized access," which can occur at any occupational level and within a large demographic, ranging from teenagers to corporate executives (Felson, 2002). The main problem is that offense-based definitions of white-collar crime, which focus on offenses pertaining to money and property, often end up analyzing individuals with "blue collars" (Braithwaite, 1985). In doing so, offense-based approaches frequently omit from their analyses crimes committed by powerful

individuals and corporations, who are able to avoid official labeling or sanctioning in the first place and thus never appearing in research samples (Daly, 1989).

A Hybrid Approach

From a conceptual standpoint, then, both offender-and offense-based definitions of white-collar crime have advantages and disadvantages. Moreover, the extent to which researchers adopt either position affects who is considered a white collar-offender and what inferences can be made about white-collar crime more generally. Yet, as some scholars have argued, the offender- and offense-based approaches are not necessarily irreconcilable; rather, "they simply emphasize different aspects of a general empirical regularity involving the characteristics or social positions of individuals and the types of offenses that they tend to commit" (Benson & Simpson, 2015, p.15). The current study adopts this logic and employs a multifaceted approach to defining and identifying inmates convicted of white-collar crimes—one that emphasizes both the status of the offender *and* the illegal nature of the act. It is important to note that the idea that white-collar offenders are especially sensitive to the pains of imprisonment was developed with high status offenders in mind. In other words, judges and others who push the special sensitivity hypothesis are referring to offenders like Kenneth Lay or Bernard Madoff, not some low-level embezzler. As such, white-collar offenders in this study will be identified based on a combination of factors that will include the nature and characteristics of the offenses that they committed, as well as selected indicators of social status. This approach will permit the examination of high status offenders as well as those of lesser social status, thus making it possible to assess whether social status influences reactions and adjustments to incarceration. The precise criterion for identifying white-collar offenders will be discussed in detail in Chapter 3.

For the purpose of studying the special sensitivity and special resiliency hypotheses among incarcerated white-collar offenders, the main limitation of most data sources is obvious: They are not based on samples of white-collar offenders who have actually served time in prison. Thus, what can be said about the special sensitivity and special resiliency hypotheses, as they relate to the white-collar prison experience, is contingent upon using an appropriate data source—one that include measures of status *and* the offense for those who have been housed *within* correctional facilities. The current study uses such data, and is based on a large, nationally representative sample of inmates from both state and federal prisons. In addition to providing information on the status and background of inmates, including their sex, age, level of education, and income, the data include measures that are indicative of white-collar type offenses, including those facilitated by specialized opportunity or access. A full description of the data, including the source, sampling strategy, statistical analyses, variables, and the operationalization of the measures of special sensitivity and special resiliency are presented in the third chapter.

INCARCERATED WHITE-COLLAR OFFENDERS

Until recently, there existed a widespread belief that white-collar offenders have an especially difficult time adapting to prison life. Known as the special sensitivity hypothesis, proponents of this perspective argue that the social backgrounds of white-collar offenders make them more sensitive to the pains of imprisonment than other offenders (Mann, Wheeler, & Sarat, 1979; Payne, 2003; Pollack, 1983; Renfew, 1977; Wheeler, Mann, & Sarat, 1988b). Conversely, others scholars maintain that the background characteristics originally thought to make incarcerated white-collar offenders especially vulnerable to negative experiences may actually serve as an asset in prison (Benson & Cullen, 1988; Stadler, Benson, & Cullen, 2013). To date,

however, little has been done to rigorously assess the validity of either position, and much of what is known about the prison experience of white-collar offenders comes from anecdotal accounts and a few studies based on small sample sizes. The following paragraphs review this line of inquiry, as well as what has been said about the state of incarcerated white-collar offenders with respect to the special sensitivity and special resiliency perspectives.

The Special Sensitivity Hypothesis

The idea that white-collar offenders are especially sensitive to the prison experience stems from the fact that they differ substantially from other offenders with respect to their social and background characteristics, as well as their experience with the criminal justice system (Benson & Kerley, 2000; Benson & Moore, 2002; Weisburd, Wheeler, Waring, & Bode, 1991). In light of these differences, members of the criminal justice community—namely judges—have argued that indoctrination to prison life is particularly shocking for newly incarcerated white-collar offenders. Similarly, these individuals maintain that typical street offenders, who often come from more disadvantaged backgrounds, are far less susceptible to the pains of imprisonment. The notion of special sensitivity was first introduced by Mann, Wheeler, and Sarat (1979) and Wheeler, Mann, and Sarat (1988b), who conducted open-ended interviews with 51 judges across seven federal districts to assess their reasons and motivations for meting out particular sentences. A common theme throughout was the perception that the administration of custodial sanctions constituted undue punishment for white-collar offenders, whom they viewed as "high achievers" with more to lose by going to prison. As one judge explained:

> A white-collar criminal has more of a fear of going to jail than this syndrome we find in the street crime. And I am not saying that if you cut everyone they don't bleed red blood. A person who commits a robbery or an assault, they don't want to go to jail either. But

> the white-collar criminal has more to lose by going to jail, reputation in the community, business as well as social community, decent living conditions, just the whole business of being put in a prison with a number on his back demeans this tremendous ego that is always involved in people who are high achievers (Mann, Wheeler, & Sarat, 1979, p. 487).

In the same way, other judges empathized with white-collar criminals when discussing the detrimental effects of prison sentences:

> [It] can be a major disruption for the family, for the individual. It may undermine his whole career. I can probably better understand the white-collar defendant. He is more like me and that probably—I guess I do believe that white-collar defendants are more sensitive to and more affected by the prison experience (Mann, Wheeler, & Sarat, 1979, p. 485).

In essence, these interviews suggest that many judges believe that imprisonment has a much greater impact on white-collar offenders than other criminals, and that appropriate sentences should be informed by the environment from which the defendant came.

Similar observations were made by Payne (2003), who noted that the deprivations experienced by incarcerated white-collar offenders are qualitatively different from other inmates. As a result of their incarceration, Payne noted that white-collar inmates may: (1) experience a loss of status—referred to as a fall from grace—in which they fall further down the "social class ladder" than inmates who are already of lower status; (2) have fewer peers with whom they can identify while they are incarcerated; (3) lose a sense of who they are as people as a result of being stigmatized by members of society; (4) have more difficulty transitioning from a life of

freedom and autonomy to one of material deprivation and strict regulation; and (5) give up on hope for their futures, since most will never be able to work in their original career.

The Special Resiliency Hypothesis

Despite judges' commonly held belief that incarcerated white-collar offenders fare worse than their non-white-collar counterparts, researchers have since questioned the merit of the special sensitivity hypothesis. Such was the focus Benson and Cullen's (1988) research, who argued that the background characteristics of white-collar offenders may serve as a buffer against the pains of imprisonment. Drawing on qualitative, in-depth interviews with incarcerated white-collar offenders and a wide body of theory and research examining social class, stress, and personality, the authors explain why, compared to others, white-collar criminals may fare better in prison.

As Benson and Cullen pointed out, white-collar offenders often have greater amounts of personal and social capital, including higher levels education and closer ties to family, than other offenders (see also Benson & Kerley, 2000; Benson & Moore, 1992). Similarly, they are more likely to adopt non-criminal identities (Benson, 1985; Stadler & Benson, 2012). Independently, such factors have been linked to reduced stress in prison, and are discussed further in Chapter 2. Benson and Cullen also note that white-collar inmates may also have greater emotional and psychological resources than other inmates. Citing research on the sociology of emotions (Denzin, 1983; Hochshild, 1979), they explain that emotional regulation varies significantly by social class, and that many middle and upper-class occupations frequently require employees to engage in "emotional work." And while managing emotions is not specific to white-collar occupations, Benson and Cullen suggest that white-collar inmates may be more adept at

practicing it than others due to their daily experiences, thus making the transition to prison life easier.

Benson and Cullen's interviews also suggest that white-collar inmates view themselves as different from, or superior to, other inmates, which they in turn use as a coping strategy. For example, nearly every white-collar offender interviewed divided their fellow inmates into two broad categories—"those criminals" and "people like me." By doing so, they were able to distinguish themselves (i.e., the professionals) from the others, whom they deemed as "people of very low caliber of intelligence" (Benson & Cullen, 1988, p. 212). Relatedly, white-collar offenders took pride in their deliberate deference to the autocratic rules and regulations of prison life. As one inmate opined:

> I got a marvelous letter from the warden […] saying that I was outstanding. I was never late once. One hundred and eight days and I was never late once to come back. Most guys are late. I did all the duties. I did everything that was expected of me. I cooperated every way I possibly could, and I got a very marvelous letter from the warden saying that I was an outstanding person. Just the opposite of the guys who bucked the system (Benson & Cullen, 1988, p. 212).

Other inmates echoed similar sentiments regarding their experience with others:

> I get along with people perfect. I made sure, whatever they wanted, whatever they did. They gave me details to do and I did everything perfect. I was a model. When I left there (MCC), they couldn't say one bad thing about me, believe me (Benson & Cullen, 1988, pp. 212-13).

The above comments indicate that the standardized procedures and hierarchy of authority provides white-collar inmates with a frame of reference for orienting themselves to prison life

and ingratiating themselves among prison staff, which may be an extension of their regimented work environment outside of prison. As a whole, Benson and Cullen's research suggests that, contrary to popular belief, white-collar offenders might not fare worse than other offenders in prison. Yet, despite the authors' critique of the special sensitivity hypothesis and their proposed research agenda for future assessments, empirical research in this area is scant at best. It is to this limited body of research that this study now turns.

Research on White-Collar Offenders in Prison

To date, the only empirical assessment of the special sensitivity hypothesis was conducted by Stadler, Benson, and Cullen (2013), who used data on 366 male white-collar inmates from two federal correctional facilities. Employing an offense-based approach, whereby offenders were identified according to their crimes (e.g., embezzlement, fraud) rather than their characteristics, the authors compared white-collar inmates to non-white-collar inmates across five measures of prison adjustment: (1) general prison difficulties; (2) trouble sleeping; (3) concern for personal safety; (4) problems with cellmates; and (5) difficulty making friends. Congruent with Benson and Cullen's (1988) previous assertions, results from their OLS and logistic regression analyses revealed that, in general, white-collar inmates fared no worse than other inmates on the selected prison outcomes. Specifically, they observed no significant differences between white-collar offenders and other offenders with respect to sleeping difficulties, concerns for personal safety, and problems with cellmates. Interestingly, the authors did report significant differences regarding general prison difficulties and difficulty making friends: Compared to other inmates, white-collar inmates were less likely to experience general prison difficulties (O. R. = .330) and had less difficulty making friends while in prison (O. R. = .500), net of sociodemographic characteristics and institutional placement.

Despite being the only empirical assessment of the prison experience for white-collar offenders, Stadler, Benson, and Cullen interpret these findings as a challenge to the "common sense" argument that white-collar offenders, who come from privileged backgrounds, are more deeply affected by incarceration than their less privileged counterparts. Such evidence, the authors maintain, has yet to be substantiated by any empirical data. What has been empirically supported, however, are the various compositional and contextual predictors of prison adjustment—many of which are directly and indirectly associated with being a white-collar offender (Benson & Cullen, 1988). Such is the focus of the following chapter, which reviews more generally the literature on adaptation to incarceration, following the pains of imprisonment perspective as well as the importation and deprivation models commonly used to examine the prison experience.

CHAPTER 2

ADAPTATION TO INCARCERATION

Generally speaking, incarceration is synonymous with the notion of punishment, the effects of which can be deleterious for some inmates (Beccaria, 1764). The degree to which inmates are affected by the pains of imprisonment, however, depends on a host of factors, including both compositional (i.e., individual) and contextual (i.e., prison-level) characteristics (Thomas, 1970, 1977; Thomas & Foster, 1972; Thomas, Peterson, & Zingraff, 1978). On the one hand, some scholars maintain that pre-prison variables—such as offender demographics and social history—must be carefully examined in order to fully understand the extent to which inmates are able to assimilate to prison life (Harer & Steffensmeir, 1996; Irwin & Cressey, 1962; Pare & Logan, 2011; Parisi, 1982; Poole & Regoli, 1983). Recent research on street and prison gangs, for example, suggests that gang members bring their individual and cultural histories with them when they go to prison, which contributes to higher levels of individual violence (Pyrooz, Decker, & Fleisher, 2011). On the other hand, other scholars have argued that prisons are difficult environments in which to live, and that exposure to the negative atmosphere characterized by prison life increases the risk of experiencing various negative outcomes (Fleisher, 1989; Sykes, 1958; Toch, 1977). For example, research from both the United States and Canada shows that 10 to 20 percent of all inmates experience physical assault at the hands of other inmates, based on exposure periods of 6 to 12 months (Cooley, 1993; Friedmann, Melnick, Jiang, & Hamilton, 2008; Wooldredge, 1998).

This chapter reviews the extensive body of literature on prison adaptation, with a focus on both individual and environmental predictors of adjustment, including those identified in Benson and Cullen's (1988) critique of the special sensitivity hypothesis. The discussion is

divided into three sections. The first section reviews the "importation perspective" of prison adjustment, which emphasizes pre-prison characteristics as the driving force behind inmate adaptation. The second section presents the literature on the "pains of imprisonment" perspective, which is based on the idea that inmates are inherently confronted with a variety of institutional pains once incarcerated, and is examined using "deprivation" or indigenous models of adaptation. Also included in this section is a brief discussion of how examining the prison experience is best conceived as multilevel in nature. The third and final section provides a description of the current study, including the main research question and expected relationships regarding the special sensitivity and special resiliency hypotheses.

IMPORTATION MODELS OF PRISON ADJUSTMENT

As previously mentioned, the "importation" model of adaptation emphasizes the importance of pre-prison characteristics, such as individual lifestyles and histories, when examining the pains of imprisonment (Irwin, 1970; Irwin & Cressey, 1962). In other words, individuals are viewed as "importing" their own backgrounds into the prison, which can have a marked impact on how they perceive and experience the process of incarceration. Accordingly, the empirical literature on the importation perspective suggests that a number of individual differences account for the degree to which inmates are able to successfully transition to prison life, including their age, race, gender, socioeconomic status, and criminal history.

Age

The inverse relationship between age and crime is well-established in criminology (Greenberg, 1985; Hirschi & Gottfredson, 1983; Moffitt, 1993; Nagin, Farrington, & Moffitt, 1995). By the same token, research examining prison adaptations and violence consistently

documents a strong, inverse relationship between age and such behaviors (Wooldredge, 1994). Studies indicate that younger inmates tend to be involved in more rule violations (Porporino & Zamble, 1984), inmate-on-inmate assaults (Ekland-Olson, Barrick, & Cohen, 1983), as well as inmate-on-staff assaults (Wright & Smith, 1985). They are also more likely to report conflicts with others in general (Wright & Smith, 1985).

MacKenzie (1987), for example, found that the youngest inmates in her sample (e.g., those 19 years of age or less) received more misconduct tickets from the institution compared to other inmate groups, and that this number peaked during teenage years and declined significantly thereafter. Furthermore, she observed increased levels of anxiety for inmates under thirty, which was accompanied by increased conflicts other prisoners. Similarly, Gover, MacKenzie, and Armstrong's (2000) research on juvenile adaptations to incarceration across 48 U.S. correctional facilities found that juveniles who were younger experienced significantly higher levels of anxiety compared to older juveniles (see also Cesaroni & Peterson-Badali, 2010).

Younger inmates also differ in how they view the process of incarceration and others around them. For instance, Wooldredge, Griffin, and Pratt (2001) reported a significant interaction between age and prison crowding regarding prison misconducts: the positive association between prison crowding and misconduct was most pronounced for younger inmates. While this may be a reflection of the inability of correctional staff to exert direct control on inmate behavior, it may also be due to the fact that younger inmates are confronted by a different set of problems upon entering the prison system—many of which are related to interactions with other inmates. As MacKenzie (1987) noted, younger inmates have to come to terms with homosexual advances, territorial disputes, and other threats, which may not be as problematic for older, more experienced inmates. For example, Pare and Logan (2011) examined the effects of

mental illness on inmate adaptation and found that, irrespective of one's diagnosis, older inmates were less likely to experience both minor and serious victimization. Thus, it may be, as Clemmer (1958) observed, that successful adaptation to prison life requires one to embrace the inmate code, which includes "minding one's own business" and "remaining stoic" in all situations. If younger inmates perceive themselves as a living in a particularly hostile environment, then lashing out at others could be a deliberate or conscious adaptation.

With respect to the current study, then, it could be that white-collar offenders, who are older on average, are more mature and less confrontational toward other inmates, compared to other groups. This may lessen not only their chances of being victimized, but also their chances of being written up for violating the rules. To the degree that they have more life experience, they may have also had more time to develop and hone the social and mental skills necessary to navigate the difficulties associated with incarceration. Similarly, in general, "crime is a young man's game" (Witte & Tauchen, 1994; see also Gottfredson & Hirschi, 1990). Thus, the older one gets, the less appealing it may be to engage in criminal activities, including various prison infractions.

Race

The existing literature also suggests that inmate race is a significant individual-level predictor of prison adjustment, which may be an extension of the race-crime relationship occurring outside the prison walls (Carroll, 1974; DeLisi, Berg, & Hochstetler, 2004; Harer & Steffensmeier, 1996; Innes, 1997; Lawson et al., 1996; Parisi, 1982; Poole & Regoli, 1983; Wooldredge, 1999). Previous explanations regarding racial differences in prison adjustment are based on the assumption that disadvantaged minority groups are more resilient to the prison environment due to their experience in the ghetto subculture, which ultimately prepares them for

the pains of incarceration (Wacquant, 2001; Wright, 1989). Such environments, characterized by abject poverty, legal cynicism, and the omnipresent prospect of victimization, require residents to be tough and cunning, and to exercise violence whenever necessary—to embrace and internalize what Anderson (1999) referred to as the "code of the street" (see also Sampson & Bartusch, 1998). For those residents who end up incarcerated, the code may be imported into the prison system as a way of maintaining one's reputation or credibility. Specifically, inmates who adhere to the code may be more violent, hostile, and otherwise defiant toward prison staff, as well as fellow inmates, as a way to establish a dominant prison identity.

Wooldredge (1994), for example, found that non-white inmates were significantly more dangerous prisoners than white inmates. In the same way, Harer and Steffensmeir (1996) used data from 58 all-male federal institutions to examine racial differences in both violent (e.g., aggravated assault) and non-violent (e.g., drug possession) offenses for black and white inmates. Controlling for a host of individual (e.g., age), prison environment (e.g., crowding), and community background (e.g., community percentage black) variables, results from their logistic regression analyses indicated an importation effect. Specifically, net of relevant control variables, black inmates had higher violent misconduct and slightly lower alcohol/drug misconduct rates, compared to their white counterparts—a finding that parallels normative racial differences existing within the larger society. Similar results were also reported by DeLisi, Berg, and Hochstetler (2004), whereby inmates from racial and ethnic minority groups were significantly more violent than white inmates, based on their accumulation of misconduct tickets for engaging in violent behavior.

Racial differences among inmates have also been observed with respect to their internal mental states. For instance, Wooldredge (1999) examined the experiences and psychological

well-being of males in Ohio correctional facilities and found that, compared to other groups, white inmates had higher levels of depression, anxiety, and stress—all of which have been previously linked to maladaptive coping mechanisms outside of prison, including alcohol and drug use (Grant et al., 2004). Thus, it could be that, as a group, white-collar offenders are especially different from other inmates with respect to rule infractions and deference to authority due to their racial backgrounds (Wheeler et al., 1988a).

Gender

There exists a spate of research indicating the significance of inmate gender in predicting prison adjustment (Casey-Acevedo & Bakken, 2003; Craddock, 1996; Harris, 1993; Hart, 1995; Jiang & Winfree Jr., 2006; Kruttschnitt, Gartner, & Miller, 2000; Zingraff, 1980). Specifically, the literature suggests that previously established gender-based differences—such as those pertaining to family life and social support—are brought into the prison, which further shapes inmates' values, subcultures, and behaviors (Owen, 1998; Pollack, 2002). Zingraff (1980), for example, studied two gender-specific youth correctional facilities and found that, compared to male inmates, females placed a greater priority on interpersonal ties within the facility which, in turn, were linked to lower levels of prisonization. Recently, Jiang and Winfree Jr. (2006) used data from the U.S. Census Bureau on over 14,000 respondents across 275 state prisons to examine the predictors of rule violations—such as drug and alcohol use—for male and female inmates. Results from their multilevel analyses suggest that the forces behind prison misconduct are different for men and women: For male inmates, age, race, criminal history, drug use, custody level, and prison size significantly affected their rate of misconduct; for female inmates, age, criminal history, sentence length, and mean prison age were significant predictors. Importantly, the authors also found that men and women differed in the amount of social support

they received: Compared to male inmates, female inmates had significantly higher levels of social support. Jiang and Winfree interpret this finding as supportive of the importation perspective, maintaining that female inmates are more relationship oriented and, as a result, are more likely to participate in inmate-organized clubs or social groups (see also Biggam & Power, 1997). Thus, since most white-collar offenders are males, it could be that certain predictors, such as those listed above, are more relevant for examining how they adjust to prison life (Benson & Simpson, 2015; Wheeler et al., 1988a).

Socioeconomic Status

Similar to the established relationship between SES and crime in other areas of the discipline (Shaw & McKay, 1942; Sampson & Groves, 1989; Wilson, 1987), studies that have examined its effect on prison inmates report analogous findings. Wright's (1989) study on race and economic marginality in explaining prison adjustment found that inmates with higher levels of education (e.g., beyond high school) and inmates who were employed before their incarceration were less likely to be written up for assaultive and disruptive infractions, while Wooldredge (1999) reported that less-educated inmates were more likely to experience prison-related stressors, including depression and anxiety. In the same way, Sappington (1996) observed a positive relationship between education and perceived control over one's prison environment—specifically, more education was associated with the beliefs that (1) one might control one's own behavior; (2) one's actions might affect one's treatment; and (3) one might enjoy oneself in prison. Shortly thereafter, Gendreau, Goggin, and Law (1997) conducted a meta-analysis of 39 studies, which generated 695 correlations with prison misconducts. Their results suggest that social achievement—which was based on measures of education, employment, and income—was a moderate and significant predictor across all studies. Inmates

who scored higher on these measures were less likely to engage in misconduct-related outcomes. Regarding the current study, since white-collar offenders tend to be more educated and steadily employed, they may be less likely to experience the pains of imprisonment (Benson & Simpson, 2015; Wheeler et al., 1988a).

Mental Illness

Mental illness is a strong predictor of negative life outcomes—both inside and outside of prisons (Blitz, Wolff, & Shi, 2008). However, the prevalence of mental disorders is substantially higher in correctional facilities than in the general population and several studies suggest that, compared to other inmate groups, mentally disordered inmates have more difficulty adjusting to prison life (Cooley, 1992, 1993; Diamond et al., 2001; Wolff, Blitz, & Shi, 2007). Drawing on data from 7,221 male inmates and 564 female inmates across 14 prisons, Blitz and colleagues (2008) found that male inmates with mental disorders were approximately 60 percent more likely to be victimized over a six-month period, compared to male inmates without these disorders. A similar pattern was observed among female inmates: Those with mental disorders were roughly 70 percent more likely to be victimized than those with no disorder.

According to the importation perspective, then, the disproportionate rate at which inmates with mental disorders experience the pains of imprisonment is a function of their behavior toward staff and other inmates. For example, inmates import the characteristics associated with given disorder into the prison atmosphere. Depending on the type of disorder, some inmates may appear vulnerable and, as such, may be stigmatized and labeled by other inmates as a suitable target to establish dominance, gain power and status, or to generate thrills while not risking their own safety (Felson, 2004). Conversely, inmates with mental disorders may engage in provocative behaviors—such as lashing out at others—that deviate from prison norms and

elicit negative reactions from fellow inmates (Bottoms, 1999; Cooley, 1992; Irwin & Cressey, 1962; Silver, 2002).

Such was the focus of Pare and Logan's (2011) examination of the relationship between mental disorders and minor and serious violent victimization in state and federal facilities. Results from their logistic regression analyses suggest that inmates with mental disorders are not any more likely to be targeted as being vulnerable than other groups. However, the authors did find support for the notion that certain disorders are associated with more provocative behaviors and increase the likelihood of experiencing institutional pains. Inmates with personality disorders—including psychopathy and antisocial personality disorder—were more likely to experience minor and serious victimization, and these relationships were fully mediated by measures of provocation, such as verbal and physical abuse toward staff and other inmates. Paraphrasing Pare and Logan, inmates with personality disorders are more likely to be victimized because they are also the ones who are most likely to "throw the first punch." To the extent that white-collar offenders, as a group, have higher levels of social capital and greater access to social support and resources than other offenders, they may also be less likely to have ever been diagnosed with a mental disorder and, as such, might be less susceptible to various prison stressors (Benson & Cullen, 1988; Stadler, Benson, & Cullen, 2013).

Criminal History

Finally, research exists to suggest that prior problem behavior is a strong predictor of future problem behavior (Barnes, Beaver, & Boutwell, 2011; Moffit, 1993; Nagin & Paternoster, 1991; Wright et al., 2014). Relatedly, the extent to which inmates successfully transition to prison life may be a reflection of their previous experiences with the criminal justice system (DeLisi, 2003; Kerley, Copes, Tewskbury, & Dabney, 2011; Trulson, 2007). DeLisi's (2003)

study of 1,005 inmates in the southwestern United States found that 40 percent of the prison population constituted chronic or extreme career offenders, even while incarcerated. Furthermore, inmates defined as career criminals accounted for the majority of violent crimes, including 100 percent of the murders, 75 percent of the rapes, 80 percent of the arsons, and 50 percent of the aggravated assaults while incarcerated. Similar findings were reported by Trulson (2007), who found that, among other pre-institutional characteristics, state-committed inmates with earlier, more serious, and more extensive delinquent histories were the most likely to engage in the most serious forms of institutional misconduct .

In their report on gang suppression and institutional control, Trulson, Marquart, and Kawucha (2006) also noted that inmates with prior street gang affiliations, despite their underrepresentation in the prison population, cause a disproportionate share of the problems in prison and are a significant administrative issue for prison managers. For example, Tasca, Griffin, and Rodriguez (2010) drew on self-report data from in-depth interviews with incarcerated juvenile males in Arizona and New York facilities and found that gang membership significantly influenced inmate assault. Specifically, inmates with prior street gang memberships were 2.39 times more likely than inmates who were non-gang members to assault another inmate—net of deprivation measures, such as threats to physical safety and time served. Because white-collar offenders tend to have less experience with the criminal justice system, it could be that they are more likely to defer to the autocratic rules of the prison system and avoid a number of negative outcomes, such as victimization or prison misconduct (Benson & Moore, 1992).

THE "PAINS OF IMPRISONMENT" AND DEPRIVATION MODELS OF PRISON ADJUSTMENT

The "pains of imprisonment" is a term that was first coined by Gresham Skyes (1958), who used it to encompass numerous social-psychological deprivations associated with the prison environment, which he viewed as having depersonalizing and stigmatizing effects on the lives of the inmates. Drawing on the previous work of Clemmer (1940), Skyes argued that prisons are custodially oriented, organizational structures (analogous to Goffman's [1961] notion of "total institutions") that serve to alienate inmates by depriving them of life's most basic amenities, including liberty, goods and services, heterosexual relations, security, and autonomy. Similarly, Toch's (1977) research on inmate and staff perceptions within a maximum security prison indicated that issues of privacy, safety, structure, support, emotional feedback, social stimulation, activity, and freedom were most concerning to inmates (see also Wright, 1985).

Following Sykes (1958) and Toch (1977, 1984), a number of scholars began to examine the association between institutional characteristics and unfavorable outcomes—the assessment of which is now commonly referred to as the "deprivation" or indigenous model of prison adaptation. Zamble and Porporino (1988), for instance, identified reduced autonomy, separation from family and friends, personal safety, problems with other inmates, boredom, and dissatisfaction with overall institutional support, among others, as primary sources of institutional pain. Similar results were reported by Wright (1989, 1993), who noted that the pains of imprisonment were most pronounced for inmates who were concerned about (1) their personal safety; (2) their lack of privacy; and (3) their lack of social support and inability to interact with others. Likewise, Wooldredge's (1999) research on male inmates across three correctional facilities in Ohio found that they were significantly more likely to report feeling depressed, anxious, and stressed when they engaged less frequently in activities designated for

self-improvement (i.e., deprivation of autonomy), experienced a recent victimization (i.e., deprivation of security), and received fewer visits each month from outsiders (i.e., deprivation of relationships). In addition to the well-documented relationship between institutional pains and prison life, research suggests that some characteristics of the prison environment may exert especially notable influences on the well-being of inmates. Such factors include prison crowding, the staff-to-inmate ratio, racial integration, and custody level.

Prison Crowding

Although findings are mixed, there exists a wide body of literature that links prison crowding to one or more indicators of inmate maladjustment (Gaes & McGuire, 1985; Steiner & Wooldredge, 2009a). Gaes (1985), for instance, observed a positive relationship between inmate densities and higher levels of assault and misconduct, though he interpreted his findings with caution due to the inconsistency with which crowding has been previously measured. Bonta and Gendreau's (1990) meta-analysis of 26 empirical studies on the effects of overcrowding revealed that the experience of physiological and psychological stress was significantly greater for inmates housed in more crowded facilities, despite having a small effect size (see also Ruback & Innes, 1988).

Wooldredge, Griffin, and Pratt (2001) used pooled logistic regression analysis and multilevel modeling to predict various forms of inmate misconduct across three states. Their results showed that higher levels of prison crowding were associated with higher rates of rule infractions across all states, net of individual-level influences, such as race and criminal history. As previously discussed, the authors also observed a significant interaction effect between prison crowding and inmate age: Regardless of individual relationships, higher levels of crowding produced stronger inverse relationships between age and misconduct. Wooldredge and

colleagues interpret these findings as support for the notion that prison crowding weakens the direct control that institutions exert on inmate behavior, which may be especially pronounced for younger inmates (see also Franklin, Franklin, & Pratt, 2006). Lahm (2008) elaborated on this idea by noting that in larger, more populated facilities, inmates have a greater likelihood of coming into contact with one another to engage in rule infractions than smaller facilities. However, she also noted that irrespective of whether a facility is overcrowded, correctional staff members are never able to monitor all areas of the prison grounds at all times. This, in turn, gives inmates greater freedom and provides them with more opportunities to break the rules. Relatedly, the extent to which inmates *perceive* prisons to be overcrowded has been linked to greater psychological stress and deviant behavior, which may be influenced by institutional-level factors. Wooldredge (1997), for example, used logit regression analyses to assess the possible influences on inmate perceptions of overcrowding for males in housed in Ohio correctional facilities. His findings suggest that inmates are more likely to perceive a crowded environment if they (1) receive fewer visits from family or friends; (2) have experienced recent victimization; and (3) are housed in a facility with a linear architectural design.

Racial Integration

While the probability of coming into contact with others in crowded facilities has been shown to influence inmate adaptation, research also indicates that the racial composition of the prison population is an important predictor of adjustment (Reardon & Eitle, 2000; Reardon & Firebaugh, 2002). That is, although the frequency with which inmates interact on a daily basis matters, so too does the racial diversity of a given facility. Certain facilities—in essence, those with more minorities—may be more restrictive and may provide differential access to resources more so than other prisons, which could result in higher rates of inmate misconduct as a response

to deprived conditions. It might also be the case that white inmates, housed in predominantly non-white institutions, feel that the living conditions are especially threatening. Accordingly, they may act out aggressively because they feel vulnerable, which may be influenced by their own preexisting beliefs about race and violence (Lahm, 2008). For example, Fuller, Orsagh, and Raber's (1977) study of the North Carolina prison system found that 40 percent of the violent incidents that occurred were interracial, the majority of which were initiated by African Americans on Caucasian victims. More recently, Lahm's (2008) multilevel assessment of prison violence documented a positive association between the proportion of minorities and non-deadly inmate-on-inmate assaults: As the proportion of non-whites in the prison population increased, so too did the mean frequency of assault.

Custody Levels and Prison Type

With the exception of crowding, institutional properties, such as level of security and prison type, have not been used to explain inmate adaptations; yet, such characteristics are both theoretically and practically relevant. For instance, it is important to consider cross-prison differences—such as an inmate's level of custody—because it provides an indication of which facilities are "softer" or "harder" places to do time. Such was the focus of Camp, Gaes, Langan, and Saylor's (2003) multilevel assessment of how prisons influence inmate behavior. Specifically, they observed a positive relationship between the security level of an inmate and violent misconduct and drug misconduct—rule infractions that are of particular concern to prison administrators. Similar results were reported by Worrall and Morris (2011), who also used hierarchical linear modeling to examine the relationship between inmate custody levels and prison rule violations for over 70,000 inmates in the Texas prison system. Results from their analyses showed that custody levels were strongly and positively correlated to misconduct—net

of other inmate-level and prison-level variables and accounting for the endogeneity of custody levels.

Likewise, it is relevant to consider the *type* of prisons in which inmates are housed when examining the degree to which they are able to adjust their incarceration, such as whether the facility is a state or federal entity. Although a paucity of research exists on specific differences between inmates residing in state versus federal facilities regarding their ability to cope, data from the Bureau of Justice Statistics (2013) show that institutional placement is primarily contingent upon the type of crime committed. Typically, offenders sentenced to federal prisons are those who have violated federal laws including, but not limited to: (1) white-collar crimes, such as securities or mail fraud; (2) drug trafficking; (3) organized crime; and (4) robbing a federally chartered bank. Conversely, offenders sentenced to state prisons are those who have been found guilty of a felonious act by state authorities including, but not limited to: (1) violent crime, such as murder, rape or sexual assault, and armed robbery and (2) white-collar crimes that do not violate federal law, such as embezzlement. Indeed, in 2012, 54 percent of inmates in state prisons (707,500) were serving time for violent offenses (Bureau of Justice Statistics, 2013). Thus, it could be that state institutions, which typically house a higher proportion of violent offenders than federal facilities, could affect the degree to which inmates are able to cope with the pains of imprisonment. Importantly, since some white-collar offenders—based on the type of crime committed and available bed space in a given facility—do end up in state prisons, it is important to account for these inter-institutional differences.

Prison Adjustment as Multilevel

While deprivation and importation models of prison adjustment have been traditionally conceived as rival perspectives, there is good reason to believe that they operate in conjunction

with one another. For instance, research by Thomas and colleagues (Thomas, 1970, 1977; Thomas & Foster, 1972; Thomas, Peterson, & Zingraff, 1978) suggests that both environmental or institutional factors and pre-institutional characteristics affect the degree to which inmates adapt to prison life. As Wooldredge (2003) explained, it is better to analyze deprivation and importation characteristics in tandem rather than comparatively so as to gain a more complete understanding of the issue, since features of each perspective has garnered empirical support.

An increasingly popular method for estimating both deprivation and importation models as predictors of prison adjustment is hierarchical linear modeling (HLM) (Wooldredge, 1997). Specifically, HLM allows researchers to analyze both contextual (i.e., environmental) and compositional (i.e., individual) effects in conjunction with one another regarding their effect on a particular outcome of interest. For example, HLM can be used to estimate the effects of individual characteristics associated with white-collar inmates—such as their social status—with respect to how they fare on various prison outcomes. At the same time, however, it allows for the examination of prison-level characteristics that might influence prison adjustment—such as prison type—above and beyond the effects of being a white-collar offender.

THE CURRENT STUDY: RESEARCH QUESTION AND EXPECTED RELATIONSHIPS

So far, this study has provided a rationale for studying incarcerated white-collar offenders: (1) there are more white-collar offenders in correctional facilities now than ever before; (2) white-collar offenders differ dramatically from non-white collar offenders with respect to their demographic and criminal histories; (3) past research suggests that different inmate groups vary in their ability to adapt to prison life, as a result of both individual and institutional characteristics (in particular, those described above); and (4) a paucity of empirical

research exists on this specific topic. The current study adds to the limited knowledge regarding white-collar offenders who end up in prison by examining nationally representative data using multilevel modeling. Specifically, it seeks to answer the following research question, based on two competing hypotheses:

RQ: Do white-collar offenders significantly differ from non-white-collar offenders in their ability to adjust to prison life?

H1—The Special Sensitivity Hypothesis: White-collar offenders will fare significantly *worse* in prison, and will thus be *more likely* to experience negative prison outcomes, compared to non-white-collar offenders.

H2—The Special Resiliency Hypothesis: White-collar offenders will fare significantly *better* in prison, and will thus be *less likely* to experience negative prison outcomes, compared to non-white-collar offenders.

These hypotheses are empirically assessed and findings are presented in the results section. Before presenting the results, however, a discussion of study's methodology is necessary, including the sample and data source upon which analyses and inferences are based, the measurement of all variables, the statistical technique, as well as descriptive statistics for each variable. Such is the focus of the following chapter.

CHAPTER 3

METHODS

As discussed earlier, prior research on the special sensitivity and special resiliency hypotheses is based primarily on anecdotal accounts and in-depth interviews with both incarcerated white-collar offenders and the judges who sentenced them to prison (Benson & Cullen, 1988; Wheeler et al., 1988b). To date, only one empirical study exists regarding the prison experience for white-collar offenders—the results of which question the merit of the idea that white-collar offenders are especially sensitive to the pains of imprisonment (Stadler et al., 2013). This research is important in that it represents the most methodologically rigorous attempt thus far to study white-collar inmates. Despite its contribution to the literature, however, the study by Stadler et al. (2013) suffers from at least three shortcomings.

The first problem is that the data upon which the Stadler et al.'s analyses and findings are based come from a non-representative prison sample. They examined white-collar offenders residing in two federal correctional facilities—one of which had a medium-security designation, the other of which had a minimum security designation. As such, they were unable to assess in detail the extent to which prison type influences the overall prison experience for white-collar offenders. As previously mentioned, a number of white-collar offenses violate state laws, and it is therefore necessary to investigate white-collar offenders who end up in state facilities, as they may experience prison differently from those who end up in federal facilities. Relatedly, Stadler et al.'s results are based on regression models at the individual-level only, and thus they do not account for the aggregate-level, contextual characteristics of institutions that can simultaneously impact the overall prison experience of white-collar offenders. From a methodological standpoint, using single-level techniques can also affect the standard errors of the regression

coefficients—a problem that is discussed further in subsequent sections. The third and final issue is that Stadler et al. examined only those inmates whose crimes fit the offense-based definition of white-collar crime. Accordingly, there is no way of knowing whether variation in their outcome variables is explained by differences in the offenders' social status. Again, measures of social status are paramount when assessing the special sensitivity hypothesis because this hypothesis was originally developed with high-status white-collar criminals in mind.

The goal of this chapter is to address these problems in order to provide a more complete picture of the white-collar prison experience. The chapter is divided into six sections. The first section describes the data source and sample characteristics upon which analyses are based. The second section then presents the relevant prison outcomes (i.e., the dependent variables) for assessing the validity of the special sensitivity and special resiliency hypotheses. The third section details the primary predictor of prison adjustment for the current study—being a white-collar offender—with respect to its conceptualization and operationalization, and how this represents an improvement over previous research. Following this discussion, section four lists and describes other important predictors of prison adjustment, with a focus on both individual-level and aggregate-level measures. The fifth section specifies the statistical technique used to evaluate the special sensitivity and special resiliency hypotheses, and why it is particularly suitable for the current study. The sixth and final section provides a summary table of all measures and gives an overview of the statistical models that are presented in the results section.

DATA SOURCE AND SAMPLE

Date Source

The current study uses data provided by the Survey of Inmates in State and Federal Correctional Facilities 2004—a collaborative effort from both the Bureau of Justice Statistics (BOJ) and the Department of Justice (DOJ). Based on data self-reported by inmates, it provides detailed information on a nationally representative sample of 18,185 respondents housed in 287 state prisons and 39 federal prisons (Bureau of Justice Statistics 2004; U.S. Department of Justice 2006). Collected in 2003-2004, the data also include a modified structured clinical interview for the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV).

Prior research on prison adjustment is typically based on official data—such as inmate files and disciplinary reports—as sources of information on the prison experience. However, as Wooldredge (1994) explains, these data might be distorted or biased if inmate misconduct is detected and reported selectively. For example, if correctional officers are more likely to sanction certain types of inmates (e.g., men as opposed to women), then the official data will reflect not only the behavior of the inmates but also the behavior of the officers (see also Hewitt, Poole, & Regoli, 1984; Poole & Regoli, 1980; Ramirez, 1983; Sellin, 1967). Using self-report data may remedy this problem, because it is more likely to include both detected and undetected (i.e., "hidden") misconduct. Self-report data also have the advantage of providing crucial information not available in official records, including inmates' perceptions and attitudes toward prison officials (see also Hindelang, Hirschi, & Weis, 1981). Furthermore, self-report studies on inmate adaptations have become more common over time (Braswell & Miller, 1989; Ellis, Grasmick, & Gilman, 1974; MacKenzie, 1987; Nacci, Teitlebaum, & Prather, 1977; Steiner &

Wooldredge, 2009b; Wooldredge, 1998; Wooldredge, Griffin, & Pratt, 2001). In line with this trend, the following study uses self-report data.

Sample

The survey used a two-stage sample design: Prisons were selected in the first stage and inmates within prisons in the second stage. In stage one, prisons were selected using stratified random sampling with probability proportional to size—that is, larger prisons were more likely to be selected because they have more inmates, with adequate coverage of female facilities and prisons with medical or mental health functions. In stage two, inmates were selected at random for state prisons, whereas stratified random sampling was used for federal prisons. For example, drug offenders were undersampled and non-drug offenders were oversampled to ensure adequate sample size for those incarcerated for non-drug-related offenses. The sample characteristics for the current study are reported in Table 1.

As can be seen, the majority of the sample is comprised of inmates incarcerated for non-white-collar offenses. Approximately half of the respondents identified themselves as white (49.1%), while the remainder identified themselves as black (42.4%) or some other racial group (9.1%). Additionally, nearly one quarter of inmates identified themselves as being of Hispanic ethnicity (18.8%). Almost 8 in 10 of the respondents are male (78.6%), and the average age of the sample is about 36-years old. Not surprisingly, most respondents appear to have a criminal history—indeed, a majority had been arrested at least once before their current admission (81.3%) while almost 17% of the sample had spent time in another correctional facility. A substantial portion of respondents also appear to have prior issues with drugs and alcohol (60.8%), as well as mental disorders (26%).

Table 3.1. Sample Characteristics (n = 18,185).

Characteristics	Percentage	Number
Race/Ethnicity		
White (reference category)	49.1	8,931
Black	42.4	7,720
Other	9.0	1,655
Hispanic (reference category)	18.8	3,428
Male	78.6	14,297
Age (mean years)	35.8	--
Criminal History		
First arrest	18.6	3,382
Arrested 1-2 times	29.3	5,302
Arrested 3-5 times	24.9	4,519
Arrested 6+ times	27.1	4,928
Correctional History	16.7	3,036
Alcohol/Drug History	60.8	10,095
Mental Health History	26.0	4,731
Time in Prison (mean years)	3.9	--
Federal Institution	20.0	3,686

Finally, the majority of respondents reside in state facilities (80%). The average sentence length is roughly 4 years.

PRISON OUTCOMES: DEPENDENT VARIABLES

Past research has examined the special sensitivity and special resiliency hypotheses using various indicators of prison adjustment. For example, Stadler et al. (2013) compared white-collar offenders to non-white-collar offenders across five prison outcomes, including the experience of general difficulties in prison, trouble sleeping, concerns about personal safety, problems with cellmates, and difficulty making friends. Such measures are meaningful in that they serve as general proxies for both positive and negative prison experiences (Benson & Cullen, 1988; DeLisi et al., 2004; Jiang & Winfree, 2006; Wooldredge, 1999). In line with this logic, the current study extends the research of Stadler et al. (2013) and assesses the special sensitivity and special resiliency hypotheses by comparing the prison experience of white-collar offenders to other offenders across *four domains* of prison life. Within each domain, different prison outcomes are examined. These domains include (1) victimization, (2) prison conduct, (3) psychological adjustment, and (4) participation in prison programs.

Victimization

The first domain of prison life on which white-collar offenders are compared to other offenders is *victimization*. It is based on whether inmates, since their most recent admission, were injured in a fight, assault, or incident in which someone tried to harm them. A three-category multinomial variable is used to assess the extent to which inmates are victimized in prison, and is coded according to whether inmates experienced some form of serious victimization, minor victimization, or no victimization (the reference category). For example,

respondents are coded as having experienced serious victimization if it involved the following: being stabbed, wounded by a gun, suffering from broken bones or internal injuries, being knocked unconscious, or being sexually assaulted. Inmates are coded as having experienced minor victimization if they had been victimized, such as being bruised, cut, scratched, or welted, but did not experience any of the aforementioned events. Finally, the third category includes those inmates who had not been victimized since their admission.

Prison Conduct

The second domain of prison life, *prison conduct*, comprises two interrelated outcomes: *rule infractions* and *disciplinary action*. Rule infractions are measured by asking inmates whether they had been written up or found guilty of violating the rules since their most recent admission. Multinomial variables and summary indexes of rule breaking are used to assess the frequency and type of inmate misconduct, and are based on three sub-groups including *substance abuse-related misconducts*, *property-related misconducts*, and *verbal and physical misconduct.* It is important to note that these measures do not fully capture inmate misconduct and instead serve as proxies of inmate behavior, since the questions upon which they are based are only in relation to the infractions inmates were found guilty of by prison staff. Similar to self-report arrest data, then, it is possible that these reports are conservative and that inmates have engaged in misconduct more frequently than what officially reported on the survey. This issue is addressed later in the discussion of the current study's limitations.

For index measures, the respondent is given one point for each infraction committed. As an example, the index for drug and alcohol-related misconducts ranges from 0 to 2. If inmates were found guilty of *either* a drug or alcohol-related infraction, they are given one point; if they were found guilty of *both* types of infractions, they are given two points. Property-related

misconducts are based on a three-category multinomial variable and include whether inmates were written up for possessing a weapon or other forms of illegal contraband versus no misconduct (the reference category). A three-category multinomial variable is also used to measure misconducts related to verbal and physical conflict, including whether inmates were verbally or physically abusive toward prison staff and verbally or physically abusive toward other inmates versus no misconduct (the reference category).

Disciplinary action is a summary measure and is based on whether inmates had been reprimanded for breaking the rules since their most recent admission. The index ranges from 0-3 and includes whether inmates were stripped of their privileges or good time, placed in solitary confinement, or transferred to a level of higher custody within the facility. As is the case with the rule infraction indexes, inmates scoring higher on this index are those who have been disciplined by correctional staff.

Psychological Adjustment

The third domain of prison life, *psychological adjustment,* comprises three sub-categories, including feelings of *negative affect*, *treatment for mental health disorders* since admission, and *symptoms of mental health disorder*. Negative affect is a four item factor and is based on whether inmates, over the past year, (1) felt angrier than usual, (2) had lost their temper more easily, (3) had hurt or broken things due to anger, and (4) had thought a lot about getting revenge on someone ($\alpha = .734$). Treatment for mental health disorders is a summary index that ranges from 0 to 2 and is measured according to whether the respondents, since their admission, (1) had received mental health treatment, including medication for a mental or emotional condition or received counseling and (2) had been admitted to a mental hospital or treatment program. Lastly, the index for symptoms of mental health disorder ranges from 0 to 3 and is

based on whether inmates, over the past year, exhibited symptoms of (1) delusions, (2) paranoia, or (3) hopelessness.

Prison Program Participation

The fourth and final domain of prison life examined in the current study, *prison program participation*, is also a summary index ranging from 0 to 2 and is based on whether inmates participated in (1) employment counseling and (2) life skills and community adjustment classes. Participation in employment counseling is based on the following question: "Since your admission, have you joined or participated in employment counseling, including how to find a job and interviewing skills?" Likewise, participation in life skills and community adjustment classes is measured according to whether inmates, since their admission, participated in classes pertaining to "life skills and community adjustment, including anger management, conflict resolution, and personal finance." Similar to the logic of the other indexes, inmates are given a score of zero if they did not participate in either of the programs, one point if they participated in either employment counseling or life skills classes, and two points if they participated in both programs.

MEASURE OF WHITE-COLLAR OFFENDERS: INDEPENDENT VARIABLE

As noted earlier, one shortcoming of Stadler et al.'s (2013) research on incarcerated white-collar offenders is that their analyses focused solely on inmates whose crimes fit the offense-based definition of white-collar crime, such as offenders convicted of tax violations, securities violations, bribery, and embezzlement. As a result, they were unable to examine the degree to which the offenders' social status influenced their prison experience. The following study extends Stadler et al.'s (2013) research by using both an offense-based and offender-based

approach to identifying white-collar offenders to assess the merit of the special sensitivity and special resiliency hypotheses for white-collar offenders in prison.

White-Collar Prison Sample: Offense-Based Definition

Similar to the approach taken by Stadler et al. (2013), the first measure of white-collar offenders is congruent with offense-based definitions of white-collar crime in that it focuses on non-physical acts that were committed using deception to obtain tangible goods for personal gain (Edelhertz, 1970). Specifically, to fit the offense-based definition of white-collar crime, inmates had to meet the following criteria. First, the offense for which they were incarcerated had to be a profit motivated property offense. To determine this, inmates were asked the following questions: (1) Is the offense [that lead to your current admission] a property offense? and (2) Did you receive any money, checks, or bank deposits as a result? Second, their crimes had to be facilitated by specialized opportunities or access provided by their occupation or education. Measures of specialized opportunity and access are based on the following questions: (1) Before your conviction, did you have a job in which you were entrusted with money, property, or opportunities which could be turned into money?; (2) Were you able to commit the offense because of that money, property, or opportunities given by your job?; (3) Were you able to commit the offense because you had some special skills you acquired from your education or occupation?; and (4) Were you able to commit the offense because you had some special knowledge about business or government? Inmates whose crimes were profit motivated property offenses and who answered "Yes" to all questions regarding specialized opportunity and access are coded as 1 and 0 otherwise. Based on these specific criteria, a total of 932 inmates in the prison sample fit the offense-based definition of white-collar crime. This subsample of white-collar offenders will be compared to the rest of the prison sample (n=17,253) on the

Table 3.2. Summary of Measures

Independent Variables	Measurement
White-Collar Offenders	
Monthly income—month before arrest (all sources)	$7,500 or more (1 = yes; 0 = no).
Education	At least some college (i.e., freshman through senior; graduate school) (1 = yes; 0 = no).
Profit-motivated property offense	Is the offense a property offense? Did you receive any money, checks, or bank deposits as a result of the offense? (1 = yes; 0 = no).
Crimes of opportunity or specialized access	
Job opportunities to steal	Before your conviction, did you have a job in which you were entrusted with money, property, or opportunities which could be turned into money? (1 = yes; 0 = no).
Job enabled offense	Were you able to commit the offense because of that money, property, or opportunities given by your job? (1 = yes; 0 = no).
Acquisition of special skills	Were you able to commit the offense because you had some special skills you acquired from your education or occupation? (1 = yes; 0 = no).
Specialized knowledge	Were you able to commit the offense because you had some special knowledge about business or government? (1 = yes; 0 = no).
Demographic characteristics	
Gender	Male = 1; female = 0
Age (mean years)	Range: 0-84 (mean = 35.8; S.D. = 10.6)
Race/ethnicity	White/Caucasian (reference category); Black/African American; Hispanic (reference category); Other race (Asian; Native American)
Sentence length (mean years)	Range: 0-100 (mean = 3.8; S.D. = 5.1).
Criminal history	How many times have you been arrested, as an adult or juvenile, before your most recent arrest? (1) first arrest (reference category); (2) arrested 1 to 5 times; (3) arrested 6 or more times.

Correctional History	Before your most recent admission, have you ever spent time in another correctional facility? (1 = yes; 0 = no).
Employment status	During the month before arrest, did you have a job or business? (1 = yes; 0 = no).
Mental health history	Have you ever been told by a mental health professional, such as a psychiatrist or psychologist, that you had (1) Manic-depression, bipolar disorder, or mania? (2) Schizophrenia or another psychotic disorder? (3) Post-traumatic stress disorder? (4) Another anxiety disorder, such as a panic disorder? (5) a personality disorder, such as an antisocial or borderline personality disorder? (6) A depressive disorder? (7) Any other mental or emotional condition? (1 = yes; 0 = no).
Drug and Alcohol History	Have you ever attended any kind of alcohol or drug treatment program? (1 = yes; 0 = n0).
Prison Type	1 = Federal prison; 0 = State prison (reference category).
Dependent Variables	
Victimization	Since your admission, have you been injured in a fight, assault, or incident in which someone tried to harm you? What were the injuries? (1) Serious victimization: knife or stab wounds; gun shot, bullet wounds; broken bones; sexually assaulted; teeth knocked out or chipped; internal injuries; knocked unconscious; (2) minor victimization: swelling, welts, bruises, black eye, sprain, cuts, scratches; other injuries; (3) no victimization (reference category).
Prison Conduct	
Rule infractions	Since your admission, have you been written up or found guilty of breaking any of the prison rules? Substance abuse misconduct (0 = no infraction; 1= drugs or alcohol only; 2 = drugs and alcohol). Property-related misconduct: (1) weapon possession; (2) other illegal contraband; (3) no property-related misconduct (reference category) Verbal and physical misconduct: toward staff; (2) toward other inmates; (3) no verbal or physical misconduct (reference category).

Disciplinary Action	Did any disciplinary action take place for violating the rules? What disciplinary action took place? 0 = no disciplinary action; 1 = stripped of privileges/good time; 2 = stripped of privileges/good time and solitary confinement; 3 = stripped of privileges/good time, solitary confinement, and transferred to higher level of custody.
Psychological Adjustment	
Negative Affect	During the last year, have you (1) lost your temper easily or had a short fuse more often than usual? (2) been angry more often than usual? (3) hurt or broken things on purpose, just because you were angry? (4) thought a lot about getting back at someone you have been angry at? (α = .734).
MDO—symptoms	During the last year, have: (1) you given up hope for your life or your future? (2) you felt that anyone other than corrections staff has been spying on you or plotting against you? (3) you had a feeling things don't seem real, like you're living in a dream? Have you seen things that other people say are not really there? Have you heard voices other people can't hear? 0 no symptoms; 1 = hopelessness; 2 = hopelessness and paranoia; 3 = hopelessness, paranoia, and delusions.
MDO—treatment	(1) Have you taken medication for a mental or emotional condition since your admission to prison? (2) Have you received counseling or therapy since your admission to prison? (3) Have you received specific mental health treatment since your admission to prison? 0 = no treatment; 1 = medication/mental health counseling; 2 = medication/mental health counseling and mental hospital.
Prison program participation	Since your admission, have you joined or participated in (1) employment counseling (including how to find a job, interviewing skills)? (2) life skills and community adjustment (including anger management, conflict resolution, personal finance, etc.)? 0 = no participation; 1 = employment counseling; 2 = employment counseling and life skills/community adjustment.

aforementioned prison outcomes, which is made up of inmates convicted of property crimes that were not for profit (e.g., joyriding, hit-and-run causing property damage), as well as inmates convicted of various violent (e.g., assault, mugging, battery, murder, rape) and drug-related offenses (e.g., drug use, trafficking, smuggling). A summary of all measures used in the current study is listed in Table 3.2.

White-Collar Prison Sample: Offender-Based Definition

The second measure of white-collar offenders contains the same offense-based characteristics of white-collar crime listed above—that is, profit motivated property offenses facilitated by specialized access—but it also incorporates two measures of social status: one regarding educational attainment and the other pertaining to income. These criteria will allow for the identification of high status white-collar offenders, who fit within the parameters originally proposed by Sutherland (1940; 1949). Level of education is based on the following question: "Before your most recent admission, what was the highest grade of school you ever attended?" Responses ranged from "never attended" to "two or more years of graduate school." Inmates are considered as being of high social status on this measure if they reported having at least some college experience (e.g., at the freshman level). Individual income is based on inmates' reported monthly income from all sources—both legal and illegal—for the month prior to their incarceration. Values ranged from "no income" to "$7,500 a month or more," which is equivalent to more than $90,000 per year. Inmates reporting monthly incomes greater than $7,500 a month are considered as having high social status. Thus, this measure identifies inmates as white-collar offenders only if they scored high on indicators of social status *and* the offense for which they were incarcerated was a white-collar-type crime. Based on these specific criteria, a total of 132 inmates in the prison sample fit the offender-based definition of white-

Table 3.3. Sample Characteristics of White-Collar Offenders

	Offense-Based (n = 932)		Offender-Based (n = 132)		Full Sample (n = 18,185)	
	%	n	%	n	%	n
Race/Ethnicity						
White	69.0	643	73.5	97	49.1	8,931
Black	27.0	252	23.5	31	42.1	7,720
Other	4.0	37	3.0	4	9.0	1,655
Hispanic	10.7	100	9.8	13	18.8	3,428
Male	64.1	597	75.8	100	78.6	14,297
Age (years)	36.2	--	37.7	--	35.8	--
Criminal History						
First arrest	20.1	187	30.4	40	18.6	3,382
Arrested 1-2 times	26.8	250	22.6	30	29.3	5,302
Arrested 3-5 times	22.9	213	23.5	31	24.9	4,519
Arrested 6+ times	30.3	282	23.5	31	27.1	4,928
Correctional History	16.7	156	12.9	17	16.7	3,036
Alcohol/Drug History	58.2	542	54.5	72	60.8	10,095
Mental Health History	32.3	301	26.5	35	26.0	4,731
Time in Prison (years)	2.6	--	3.3	--	3.9	--
Federal Institution	26.3	245	42.4	56	20.0	3,686

collar crime. Again, this subsample of white-collar offenders will be compared to the rest of the prison sample on the aforementioned prison outcomes—specifically, inmates who were convicted of property offenses that were not for profit, as well as those who were incarcerated for violent and drug-related offenses. However, because the number of high status white-collar offenders is much smaller than the population of non-white collar offenders (132 vs. 18,053), a random sample of just over 1,000 inmates will be drawn from the population of non-white-collar offenders and compared to the white-collar subsample to avoid artificially inflating the hypothesis tests (i.e., the standard errors of the estimates). This issue is discussed in greater detail below and also in Chapter 4. The sample characteristics for each definition of white-collar crime and how they compare to rest of the prison population are listed in Table 3.3.

Beginning with respondents in the offense-based category, the majority of white-collar offenders identified as white (69%), with the remainder identifying as either black (27%) or some other racial category (4%). Approximately 11% of white-collar offenders in this category identified as being of Hispanic ethnicity (10.7%). Similar numbers were reported by white-collar offenders in the offender-based category: most inmates were white (73.5%), while the rest of the sample was comprised of black inmates (23.5%) and those who identified with another racial group (3%). Inmates who identified as Hispanic in this group accounted for nearly 10% of the sample. Nearly two-thirds of respondents in the offense-based category are male (64.1%), with an average age of 36-years old. Inmates in the offender-based category are also predominantly male, although their proportions are greater than those in the offense-based category (75.8% vs. 64.1%) and their average age is slightly older (nearly 38-years old). As expected, the offender-based approach to defining white-collar crime produces a sample with demographic characteristics that match the popular stereotype of who the white-collar offender

is—that is, an older white male. Such characteristics are also congruent with prior research on the demographics of white-collar offenders (Stadler et al, 2013; Weisburd et al., 1991; Weisburd & Waring, 2001; Wheeler et al., 1988a).

White-collar offenders in the offense-based category appear to have criminal histories. For example, 80% of this group had at least one arrest since their most recent admission and nearly 17 % had spent time in another facility prior to their incarceration. This is surprising, as the number of multiple arrests for those in the offense-based group is twice as high as other studies that have examined the criminal history of white-collar offenders (Benson & Kerley, 2002; Weisburd et al., 1991). For instance, only 39% of the white-collar offenders in Benson and Moore's (1992) sample had on prior arrest. The majority of respondents in the offender-based category also had at least one arrest prior to their current admission and a substantial portion had spent time in another facility, but to a lesser extent (69.7% and 12.9%, respectively). Over half of the offenders in both categories have reported a history with drugs and alcohol (58.2% and 54.5%). These numbers are substantially higher than those previously reported by Benson and Moore (1992), who found that only 6% of the white-collar offenders in their sample reported to have used drugs in the past. A considerable number of inmates from each group have also reported a history of mental health problems, although the prevalence of disorder appears to be higher for respondents in the offense-based category (32.3%) than those in the offender-based category (26.5%). Most of the white-collar offenders in each group are housed in state facilities, although inmates from the offense-based category constitute a greater proportion (73.7% vs. 57.6%). Lastly, the average sentence length for respondents in the offense-based category is 2.6 years, while the average sentence length for respondents in the offender-based category is 3.3 years.

Differences and similarities exist between both groups of white-collar offenders and the full prison sample. For instance, compared to the full prison population, whites are overrepresented and blacks are underrepresented in both categories of white-collar offenders. Across groups, whites account for more than two-thirds of the white-collar population while blacks account for approximately one quarter. This is substantially different from the racial composition of the entire sample, where black inmates make up 42.4% of the population. Inmates of Hispanic ethnicity are also underrepresented in both categories of white-collar crime (approximately 10%) compared to their numbers in the full sample (nearly 20%).

With respect to both gender and age, white-collar offenders in each category closely resemble the total prison sample: Most offenders are males in their mid- to late-30s. White-collar offenders from both groups appear to be only slightly older (36.2 and 37.7) compared to the rest of the population (35.8). White-collar offenders from each category also appear to have criminal histories that are similar to the rest of the prison sample. For example, the majority of white-collar offenders in each group had been arrested at least once (80% and 69.6%) compared to non-white-collar offenders (81.6%). As noted above, this number is substantially higher than what others have found regarding the criminal histories of white-collar offenders; however, the offense for which inmates were currently incarcerated was more likely to be the first for white-collar offenders (20.1% and 30.3%) than for other inmates (18.6%).

The number of inmates who reported prior drug and alcohol use is high for the entire prison sample (over 50%), including both categories of white-collar offenders; yet the prevalence of use is slightly lower for white-collar offenders (58.2% and 54.5%) than the full sample (60.8%). The number of inmates who reported a history of mental health disorders is similar for both white-collar and non-white-collar inmates: Across all categories, over one quarter of

respondents had experienced some form of mental health disorder. Notably, the frequency of mental disorder appears to be higher for white-collar offenders in the offense-based category (32.3%) compared to those in either the offender-based category or the full prison sample (26.5% and 26%). Compared to the rest of the sample (20.0%), more white-collar offenders reside in federal facilities (26.3% and 42.2%) Finally, white-collar offenders appear to have been incarcerated for shorter periods of time (2.6 years and 3.3 years) than non-white-collar inmates (3.9 years).

ADDITONAL INDEPENDENT VARIABLES: CONTROLS FOR OTHER PRISON PREDICTORS

In addition to using two definitions of white-collar offenders to assess the special sensitivity and special resiliency hypotheses, an array of relevant control variables are measured that may contribute to variation in prison outcomes. These measures pertain to the offenders' demographic characteristics, their prison experience, their legal and social histories, as well as the aggregate-level characteristics of correctional facilities in which they reside.

Demographic Variables

The demographic variables used in the current study include inmates' gender, age, as well as their race and ethnicity. *Gender* is a dichotomous variable, coded 1 for men and 0 for women, while *age* is a continuous variable coded in years. *Race and ethnicity* are measured using three dummy variables: black (African American), other races (predominately Asian and Native American), and Hispanic, with white (Caucasian) and non-Hispanics serving as the respective reference categories for each.

Prison Experience

Prison experience is a continuous measure and is based on the number of years inmates have been incarcerated by subtracting their date of admission from the year the survey was administered.

Offender Legal and Social History

The offenders' legal and social history is assed using three indicators: (1) their criminal history, (2) their employment status before incarceration, and (3) their mental health history. *Criminal history* is comprised of a series of dummy variables and is based on the number of times an inmate was arrested prior to their current incarceration, including no prior arrests (the reference category), 1-2 arrests, 3-5 arrests, and 6 or more arrests. *Correctional history* is a dichotomous measure and is based on whether inmates had spent time in another correctional facility prior to their current incarceration. Those who answered "Yes" were coded as 1 and 0 if they did not.

Employment status is also a dichotomous measure and is based on the following question: "During the month before your arrest, did you have a job or business?" Inmates who responded "Yes" are coded 1 and 0 otherwise. *Mental health history* is based on whether inmates had ever been told by a mental health professional, such as a psychiatrist or psychologist, that they suffered from "major depression, psychosis or a psychotic disorder (e.g., schizophrenia), bipolar or manic-depressive disorder, post-traumatic stress disorder, anxiety disorder or panic disorder, personality disorder (in prison setting, the antisocial personality disorder or psychopathy is common), or other mental health disorders." Inmates who answered "Yes" to any of these items were coded as 1 and 0 otherwise.

Aggregate-Level Measures

The only aggregate-level predictor used in the current study, *prison type*, is a binary measure and is based on the designation of the prison in which inmates are housed. Inmates serving time in a federal institution are coded as 1 while inmates serving time in a state institution are coded as 0. A binary level-2 measure shows the difference in the mean of the level-1 dependent variable between the two groups of the level-2 binary independent variable. For example, the regression coefficient for prison type shows the difference in the mean number of rule infractions between state and federal prisons. Including this as an aggregate measure, then, makes it possible to answer the following question: Is an inmate housed in a type of prison that corresponds with significantly higher or lower levels of misconduct?

STATISTICAL ANALYSIS

Multilevel modeling (bi-level analyses) and single-level regression analyses are used to estimate the effects of white-collar inmate status (the main independent variable) and other relevant control variables on a host of prison outcomes (the dependent variables). In essence, multilevel modeling allows for the analysis of how individual characteristics—such as social status—influence the prison experience for white-collar inmates, while also accounting for the influence of institutional characteristics, such as prison type. Employing a multilevel framework may also provide a stronger grounding for the current study than studies based on either individual-level or aggregate-level measures of inmate adjustment, since the prison experience depends on both individual and institutional factors (Wooldredge, 2003).

This method is preferred to other, single-level statistical techniques because it accounts for the possible dependence of observations, given that inmates are clustered into 326 prisons. It is therefore reasonable to suspect that inmates from the same prison might be more alike than

inmates across different prisons, which violates one of the basic assumptions of multiple regression, and—if left uncorrected—could bias standard error estimates by pooling un-modeled contextual information into a single error term (Luke, 2004; Raudenbush & Bryk, 2002). Wooldredge, Griffin, and Pratt (2001) elaborated on this point by identifying four potential problems with using single-level techniques, such as a pooled regression model, to estimate multilevel data. First, problems regarding collinearity between individual-level and aggregate-level predictors may exist, since individual inmates tend to be non-randomly distributed across different facilities. Second, as previously mentioned, differences in the probability of selection across different contexts might produce correlated error within aggregates at the individual-level. Third, unequal error variances at the aggregate-level (i.e., heteroscedasticity) may occur, since different numbers of inmates exist within aggregates of the sample. Fourth and finally, null hypotheses tested at the aggregate-level might be biased, as they are based on the number of inmates (as opposed to aggregates) in a given model. Thus, as Wooldredge, Griffin, and Pratt (2001) noted, multilevel modeling is ideal because it allows researchers to "adjust" for the problems described above.

Multilevel modeling involves a two-stage process, whereby individual-level variables (i.e., level-1) are modeled first and prison-level or aggregate-level variables (i.e., level-2) are modeled second. It begins with an analysis of covariance (ANCOVA) to determine whether significant variation in the dependent variables is left to be explained by the level-2 predictors, after the level-1 predictors have been introduced in the model (Raudenbush & Bryk, 2002). The individual model is estimated first within each aggregate. This, in turn, produces a constant (y-intercept) for each aggregate, which reflects an "adjusted mean" on the outcome variable for

each group after controlling for the within-group variation of all level-1 predictors (Blalock, 1979; Wooldredge, Griffin, & Pratt, 2001).

Next, an analysis of variance (ANOVA) test is done to examine whether significant variation in the constants exists across each aggregate. If significant variation does exist, then introducing aggregate-level variables as a way to explain the variation left unaccounted for in the first model is practical. Conversely, if no significant variation in the y-intercepts exists, and one fails to reject the null-hypothesis, then it is not practical to proceed to with multilevel modeling, as the dependent variables are basically constants.

After testing for variation in the y-intercepts across aggregates, the next part of step one involves examining whether significant variation exists in the individual, level-1 relationships across the aggregates at level-2. This requires an analysis of covariance (ANCOVA) test, whereby first-level coefficients are estimated to determine whether they vary significantly across groups. If this is the case, it can be said that the form of individual-level relationships are a function of group membership. Put differently, this is indicative of an interaction between two units of analysis and is based on the notion that group-level characteristics may influence how individual-level variables affect a particular outcome variable. Similar to the rationale for predicting variation in y-intercepts across groups, then, significant differences in the level-1 regression coefficients across level-2 units indicate that additional level-2 predictors are necessary in order to account for these differences. If these aggregate-level predictors are statistically significant, one can conclude that they maintain an interaction effect with individual-level variables (i.e., a cross-level interaction).

If, however, no significant differences exist between the level-1 coefficients across the level-2 units, exploring the possibility of cross-level interactions is unnecessary since the

individual-level relationships are the same, irrespective of whether variation exists in the level-2 units. If this is the case, the level-1 relationships that do not differ significantly across groups should be "fixed" when estimating the level-2 model. As Wooldredge, Griffin, and Pratt (2001) noted, fixing the effects of the level-1 relationships adds the non-significant variation of these coefficients back into the error term for the tests of the level-2 predictors—a procedure that parallels a multivariate analysis of variance (MANOVA). Specifically, if no significant interaction is found between predictors, "trivial" variation in the outcome variable must be "added" back to the error term for the remaining tests of main effects.

However, because the sample of white-collar offenders who fall into the offender-based category is small (as well as the random sample of inmates to whom they are compared), the use of multilevel modeling for this group is prohibited because of a lack of variation in the dependent variables across level-2 units. As such, single-level ordinary least squares and logistic regression analyses are estimated in which prison-level effects are taken into account using Stata's Robust Cluster Option—the details of which are described in the following chapter.

CONCLUSION

In the results section, single-level and multilevel analyses are used to assess the special sensitivity and special resiliency hypotheses with respect to the selected prison outcomes. For each outcome variable, three models—including an unconditional model, a random coefficients model, and a fixed-effects model—are estimated, based on the logic of multilevel modeling as described above. The type of multilevel model used is also contingent upon the measurement of the dependent variables, which is further explained in the following chapter. Conversely, only one model is estimated for each dependent variable in the single-level analyses. Following the

presentation of the results, the final chapter discusses the study's findings with respect to both theoretical and practical application, as well as its limitations and directions for future research.

CHAPTER 4

RESULTS

This chapter presents findings from the analyses used to assess the special sensitivity and special resiliency hypotheses. First, the prison experiences of inmates who fit the offense-based definition of white-collar crime are discussed. Second, the prison experiences of inmates who match on the offender-based criteria are examined. Across the four domains of prison life analyzed, various multivariate and multilevel models are specified and estimated that are contingent upon the level of measurement for each outcome variable. All steps and models of the analyses are described in greater detail below.

MULTILEVEL ANALYSES USING THE OFFENSE-BASED DEFINITION

Victimization

Bernoulli multinomial logistic regression models were used to estimate the likelihood of white-collar offenders experiencing (1) minor victimization or (2) serious victimization versus no victimization (the reference category) while incarcerated. Bernoulli modelling is an appropriate way to assess the probability of occurrence for both types of victimization, since they are mutually exclusive measures. The first step in multilevel modeling is to analyze a null model, which contains no predictors and is used to determine whether outcome measures at level-1 vary significantly at level-2.

For minor victimization, the null model revealed significant variation across level-2 units, as indicated by the final estimation of variance components (V. C. = .551; S. D. = .742; $p < .000$), suggesting that it is appropriate to proceed with multilevel modeling. The next step is to create a model that contains level-1 predictors only, whereby the slope of the white-collar

offender variable is random while the slopes of the other predictors are fixed. Here, the variance component for the slope of the white-collar offender variable was not significant ($p > .500$), which indicates that the form of white-collar offender measure is not a function of prison type. Based on the logic of multilevel modeling described in the previous chapter (Wooldredge, Griffin, & Pratt, 2001), it is therefore necessary to "fix" the effect of the white-collar offender variable along with the other level-1 predictors for the remaining tests of main effects. As shown in Table 4.1, after fixing the effects—and contrary to the special sensitivity hypothesis—the Bernoulli model shows no significant differences between white-collar offenders and other inmates regarding the experience of minor victimization in prison.

For serious victimization, the null model also revealed significant variation at level-2 (V. C. = .680; S. D. = .824; $p < .000$). Once the level-1 predictors were added to the model, with a random slope for the white-collar offender variable and fixed slopes for all other measures, the final estimation of variance components suggested that the slope of the white-collar offender predictor does not vary significantly across prison type ($p > .500$). Furthermore, after fixing the effect of the white-collar variable along with the other level-1 measures, no significant differences were observed between white-collar offenders and other inmates with respect to experiencing serious victimization in prison—a finding which also stands in contrast to the special sensitivity hypothesis.

Although no differences were observed between white-collar and non-white-collar inmates, several other measures in the model were significant predictors of minor and serious victimization in prison. For example, compared to female inmates, male inmates were less likely to experience minor victimization (O.R. = .698; $p < .001$) but more likely experience serious

Table 4.1. Bernoulli Multinomial Fixed Effects Models Predicting the Likelihood of Minor and Serious Victimization versus No Victimization for White-Collar Offenders: Offense-Based Definition

Fixed Effects	Minor Victimization		Serious Victimization	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
Intercept	-.203***	.130	-3.22***	.039
White-Collar Offender	-.109	.896	.220	1.24
Male	.698***	2.01	1.36***	3.91
Age	-.043***	.957	-.025***	.975
Race/Ethnicity				
Black	-.324***	.722	-.193*	.823
Other	.070	1.07	-.008	.991
Hispanic	-.046	.954	-.054	.946
Time in Prison	.111***	1.11	.107***	1.12
Criminal History				
Arrested 1-2	.024	1.02	.083	1.08
Arrested 3-5	-.003	.996	.201+	1.22
Arrested 6+	.142+	1.15	.023	1.02
Correctional History	.143	1.15	.135	1.14
Employment Status	-.011	.988	-.058	.943
Alcohol/Drug History	-.001	.999	-.243**	.784
Mental Health History	.687***	1.98	.756***	2.12
Prison-Level				
Federal Institution	-.702***	.495	-.556**	.573

+p < .10; *p < .05; **p < .01; ***p < .001

victimization (O.R. = 1.36; $p < .001$). These findings partly correspond with previous studies, which document higher levels of social support for female inmates that, in turn, decrease the likelihood of experiencing the pains of imprisonment (Jiang & Winfree Jr., 2006; Zingraff, 1980). Also congruent with past research is the finding that age is inversely related to victimization in prison (Ekland-Olson, Barrick, & Cohen, 1983; Mackenize, 1987; Pare & Logan, 2011; Wooldredge, 1994). Specifically, compared to younger inmates, older inmates were less likely to experience both minor (O.R. = .957; $p < .001$) and serious (O.R. = .975; $p < .001$) forms of victimization.

Compared to white inmates, black inmates were also less likely to experience both types of victimization (O.R. = .722 and .832; $p <.001$)—a finding that parallels the results of other studies, which suggest that, compared to white inmates, black inmates are more likely to be the ones who initiate violent behavior instead of being the recipients of it (Harer & Steffensmeir, 1996; Pare & Logan, 2011; Wooldredge, 1994). The amount of time spent in prison was positively related to the likelihood of being victimized. Specifically, inmates who were incarcerated for longer periods of time were more likely to experience both types of victimization (O.R. = 1.11 and 1.12; $p < .001$). Mental health history was the strongest predictor of victimization in prison: Across both categories, inmates who had been previously diagnosed with a mental health disorder were approximately twice as likely to be victimized ($p < .001$). This finding is in line with prior research that documents a positive relationship between mental illness and victimization in prison for both male and female inmates (Blitz, Wolff, & Shi, 2008; Pare & Logan, 2011). Finally, inmates housed in federal facilities were significantly less likely to experience either form of victimization (O.R. = .495 and 573; $p < .001$).

Prison Conduct

Ordinal logistic regression and Bernoulli multinomial models were used to estimate the relationship between prison conduct and white-collar inmates, since both subdomains—various rule infractions and disciplinary action—are comprised of summary indexes and measures based on multiple categories that are mutually exclusive. Similar to the estimation of the Bernoulli models, the first step is to create a null model to determine whether level-1 predictors vary significantly across level-2 units.

Substance Abuse-Related Misconduct. For the drug and alcohol infraction index, the final estimation of variance components of the null model indicated that a significant amount of variation was left to be explained by the level-2 units, which suggests that it is appropriate to proceed with multilevel modeling (V.C. = .873, S.D. = .934; $p < .001$). After adding only level-1 variables to the model, whereby the slope of the white-collar offender variable is allowed to vary while all other predictors are fixed, the final estimation of variance components showed that the probability of white-collar offenders engaging in drug- and alcohol-related misconduct is not a function of prison type ($p > .500$). It is therefore necessary to fix the slope of the white-collar offender variable when estimating the direct effects of the model—the results of which are presented in Table 4.2.

It is important to note that for ordinal logistic regression, the form of the equation is expressed as $Y = a – bx$ (as opposed to $Y = a + bx$), which affects the interpretation of the coefficients in the HLM software. Unlike Stata and other software programs, positive coefficients and odds ratios greater than one for the predictors are interpreted as having a negative relationship with the dependent variable, whereas negative coefficients and odds ratios less than one are interpreted as having a positive relationship with the dependent variable

Table 4.2. Ordinal Logistic Regression Fixed Effects Model Predicting the Likelihood of Drug and Alcohol Infractions for White-Collar Offenders: Offense-Based Definition

Fixed Effects	**Drug and Alcohol Infraction Index**	
	Coefficient	Odds Ratio
Intercept	2.96***	19.4
White-Collar Offender	.343+	1.41
Male	-1.21***	.295
Age	.000	1.00
Race/Ethnicity		
Black	.042	1.04
Other	-.004	.995
Hispanic	.229*	1.25
Time in Prison	-.009***	.990
Criminal History		
Arrested 1-2	-.303**	.738
Arrested 3-5	-.350***	.704
Arrested 6+	-.263*	.768
Correctional History	-.381***	.682
Employment Status	.287***	1.33
Alcohol/Drug History	-.578***	.560
Mental Health History	-.108	.896
Prison-Level		
Federal Institution	.258	1.29
Threshold (d1)	2.44***	11.4

+p < .10; *p < .05; **p < .01; ***p < .001

(for a more detailed explanation of the logic behind ordinal logistic regression, see Norusis, 2012). As can be seen, the white-collar offender variable maintains a marginally significant, negative relationship with the drug and alcohol infraction index—a finding which partially supports the special resiliency hypothesis. Compared to other inmates, white-collar offenders were more likely to score lower on this scale (O.R. = 1.41; $p < .10$). In statistical terms, this means that a one unit increase in the white-collar offender variable (i.e., moving from category 0 to 1) corresponds with greater odds of scoring lower on the index, compared to other inmates and given that all other predictors in the model are held constant.

The same logic applies to the other predictor variables in the model, which also yield significant relationships with the drug and alcohol infraction index. For example, Hispanic inmates were more likely to score lower on the scale (O.R. = 1.21; $p < .05$), which is congruent with past research on prison adjustment suggesting that minority inmates have lower instances of drug and alcohol misconducts (Harer & Steffensmeir, 1996). Compared to female inmates, male inmates were more likely to score higher on the index (O.R. = .295; $p < .001$). This observation also partly corresponds with prior studies on the pains of imprisonment, which propose that the forces behind prison misconduct, including drug and alcohol infractions, are different for men and women (Jiang & Winfree Jr., 2006).

All categories of criminal history were associated with increased odds of scoring higher on the drug and alcohol infraction index: Compared to inmates whose first arrest led to their current incarceration, inmates who had been arrested at least one time prior to their most recent admission were more likely to receive a higher score (O.R. = .738, $p < .01$; .704, $p < .01$; and .768, $p < .05$). Similarly, inmates who spent time in another correctional facility prior to their most recent admission and inmates who had been incarcerated for longer periods of time were

more likely to score higher on the scale (O.R. = .682 and .990; $p < .001$). These findings are line with the plethora of research that documents a significant relationship between pre-institutional criminality and institutional misconduct (DeLisi, 2003; Kerley, Copes, Tewskbury, & Dabney, 2011; Trulson, 2007; Trulson, Marquart, & Kawucha, 2006). Finally, inmates who were employed during the month before their most recent admission were more likely to score lower on the scale (O.R. = 1.33; $p < .001$), while inmates reporting a history of drug and alcohol problems had greater odds of scoring higher (O.R. = .560; $p < .001$).

Property Misconduct. For both forms of property misconduct, the null models suggest that multilevel modeling is necessary ($p < .001$), although the slope of the white-collar offender variable for each type of misconduct does not significantly vary across prisons ($p > .500$). As such, Table 4.3 presents Bernoulli multinomial fixed effects models, which estimate the likelihood of white-collar offenders possessing weapons and other illegal items versus no infraction while incarcerated. In support of the special resiliency hypothesis, white-collar offenders were significantly less likely than other inmates to be written up for carrying weapons (O.R. = .694; $p < .05$), but were no different with respect to having other smuggled goods. Gender was the strongest predictor of weapon carrying: Compared to females, male inmates were nearly eight times more likely to do so (O.R. = 7.82; $p < .001$). Inmates with a history of mental health disorders (O.R. = 1.56), inmates who had been arrested at least once prior to their current admission (O.R. = 1.57, 1.61, and 1.13), and inmates who had been imprisoned for longer periods of time (O.R. = 1.09) were also more likely to be written up or found guilty of possessing a weapon ($p < .001$). Conversely, inmates who reported being employed before their

Table 4.3. Bernoulli Multinomial Fixed Effects Models Predicting the Likelihood of Possessing Weapons and Illegal Contraband versus No Infraction for White-Collar Offenders: Offense-Based Definition

Fixed Effects	**Weapon Possession**		**Other Illegal Contraband**	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
Intercept	-3.72***	.024	-.192***	.146
White-Collar Offender	-.364*	.694	-.117	.889
Male	2.05***	7.82	.319**	1.37
Age	-.003	.996	-.013***	.986
Race/Ethnicity				
Black	.048	1.04	-.261***	.769
Other	-.056	.945	.054	1.05
Hispanic	.214	1.23	-.177**	.837
Time in Prison	.009***	1.00	.007***	1.00
Criminal History				
Arrest 1-2	.452***	1.57	.001	1.00
Arrest 3-5	.481***	1.61	-.000	.999
Arrest 6+	.462***	1.42	-.054	.946
Correctional History	.133	1.14	.218***	1.24
Employment Status	-.336***	.714	-.049	.951
Alcohol/Drug History	.158	1.17	.259***	1.29
Mental Health History	.447***	1.56	.234***	1.26
Prison-Level				
Federal Institution	-.399	.670	-1.03***	.353

* p < .05; ** p < .01; *** p < .001

current admission were less likely to have a weapon while incarcerated (O.R = .714; $p < .001$). Inmates were also more likely to be written up for possessing other illegal contraband if they were male (O.R. = 1.37; $p < .01$), had a history a history of mental health problems (O.R. = 1.26; $p < .001$), had previously spent time in another facility (O.R. = 1.24; $p < .001$), had a history of drug and alcohol abuse (O.R. = 1.29; $p < .001$), and had been incarcerated for longer periods of time (O.R. = 1.07; $p < .001$). Alternatively, inmates were less likely to be found guilty of having other illegal items if they were older (O.R. = .986; $p < .001$), black (O.R. = .769; $p < .001$), of Hispanic ethnicity (O.R. = .837; $p < .01$), and had been sentenced to a federal facility (O.R. = .353; $p < .001$).

Verbal and Physical Misconduct. The null models for verbal and physical misconduct toward staff and other inmates showed that a significant amount of variation in each outcome is explained by the level-2 units ($p < .001$), while the random slopes models indicated that the effect of the white-collar offender slope should be fixed for each outcome ($p > .500$). The results for each model are presented in Table 4.4. Congruent with previous assertions made by Benson and Cullen (1988), and consistent with the logic of the special resiliency hypothesis, white-collar offenders were less likely than other inmates to be involved in verbal or physical altercations with prison staff (O.R. = .434; $p < .01$). However, they were not any different with respect to verbal and physical quarrels with other inmates. Inmates who were black (O.R. = 1.87; $p < .001$), male (O.R. = 1.99 $p < .001$), had a history of mental health disorders (O.R. = 2.61; $p < .001$), had previously spent time in another facility (O.R. = 1.46; $p < .01$), and had been incarcerated longer (O.R. = 1.01; $p < .001$) were also at greater odds of being found guilty of verbally and physically defying correctional staff. In contrast, older inmates (O.R. = .982; $p < .01$) and inmates housed in federal prisons (O.R. = .355; $p < .001$) had a reduced likelihood.

Table 4.4. Bernoulli Multinomial Fixed Effects Model Predicting the Likelihood of Verbal and Physical Misconduct Toward Staff and Other Inmates versus No Misconduct for White-Collar Offenders: Offense-Based Definition

Fixed Effects	**Prison Staff**		**Other Inmates**	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
Intercept	-4.34***	.012	-3.45***	.031
White-Collar Offender	-.834**	.434	-.157	.853
Male	.691***	1.99	.165	1.18
Age	-.017**	.982	-.025***	.974
Race/Ethnicity				
Black	.628***	1.87	.502***	1.65
Other	.330	1.39	.215	1.23
Hispanic	-.160	.851	.156	1.16
Time in Prison	.011***	1.01	.009***	1.00
Criminal History				
Arrested 1-2	.076	1.07	.197	1.21
Arrested 3-5	-.162	.849	.097	1.10
Arrested 6+	.123	1.13	.086	1.09
Correctional History	.380**	1.46	.225*	1.25
Employment Status	-.441***	.643	-.296**	.743
Alcohol/Drug History	-.062	.939	-.071	.930
Mental Health History	.960***	2.61	.595***	1.81
Prison-Level				
Federal Institution	-.103***	.355	-1.44**	.236

*p < .05; **p < .01; ***p < .001

Similar patterns were observed for verbal and physical disputes with other inmates: Black inmates (O.R. = 1.65; $p < .001$), inmates with mental health histories (O.R. = 1.81; $p < .001$), inmates who had been previously incarcerated (O.R. = 1.25; $p < . 01$), and inmates imprisoned for longer periods of time (O.R. = 1.01; $p < .001$) were all more likely to have problems with fellow inmates, while older inmates (O.R. = .974; $p < .001$) and inmates in the federal system (O.R. = .236; $p < .001$) were less likely.

Disciplinary Action. The final estimation of variance components of the null model for the disciplinary action index showed that a significant amount of variation exists at the prison-level (V.C. = .709; S.D. = .842; $p < .001$). However, the random slopes model suggested that the probability of disciplinary action for white-collar offenders is not contingent upon prison type ($p > .500$). As shown in Table 4.5, after fixing the effect of the slope for the white-collar offender variable across prison types, no significant differences were found between white-collar offenders and other inmates regarding disciplinary action—an observation that contradicts the logic of the special sensitivity hypothesis.

In line with the previous analyses of the current study and prior research, older inmates (O.R. = 1.02 $p <.001$) and Hispanic inmates (O.R. = 1.14 $p < .05$) were more likely to score lower on the disciplinary action scale (Porporino & Zamble, 1984; Wooldredge, 1994). Conversely, black inmates had an increased odds of scoring higher (O.R. = .816; $p < .001$) (Harer & Steffensmeir, 1996). Also compatible with other findings, gender exhibited a strong effect on the likelihood of being disciplined: Relative to female inmates, male inmates were significantly more likely to score higher on the index (O.R. = .569; $p < .001$) (Owen, 1998; Pollack, 2002; Zingraff, 1980). The likelihood of scoring higher on the disciplinary action

Table 4.5. Ordinal Logistic Regression Fixed Effects Model Predicting the Likelihood of Disciplinary Action for White-Collar Offenders: Offense-Based Definition.

Fixed Effects	**Disciplinary Action Index**	
	Coefficient	Odds Ratio
Intercept	1.21***	3.63
White-Collar Offender	.107	1.11
Male	-1.21***	.596
Age	.022***	1.02
Race/Ethnicity		
Black	-.202***	.816
Other	.016	1.01
Hispanic	.135*	1.14
Time in Prison	-.004***	.995
Criminal History		
Arrested 1-2	-.183**	.832
Arrested 3-5	-.245***	.782
Arrested 6+	-.257***	.772
Correctional History	-.161***	.850
Employment Status	.073+	1.07
Alcohol/Drug History	-.237***	.788
Mental Health History	-.344***	.708
Prison-Level		
Federal Institution	.490***	1.63
Threshold (d1)	1.96***	7.11
Threshold (d2)	4.02***	56.2

+p < .10; *p < .05; **p < .01; ***p < .001

index was also greater for inmates who reported a history of mental health disorders (O.R. = .708; $p < .001$) and for those who had been arrested at least one time before their current admission (O.R. = .832, $p < .01$; O.R. = .782, $p < .001$; O.R. = .772, $p < .01$). Similar patterns held for inmates who had spent time in another correctional facility (O.R. = .850; $p < .001$), who had been incarcerated for longer periods of time (O.R. = .995; $p < .001$), and who had a history of drug and alcohol abuse (O.R. = .788; $p < .001$). Lastly, inmates who were employed before their incarceration (O.R. = 1.07; $p < .10$) and inmates who were housed in federal facilities were more likely to score lower on the disciplinary action index (O.R. = 1.63; $p < .001$).

Psychological Adjustment

A series of Poisson-based and ordinal logistic regression multilevel models were used the estimate the extent to which white-collar offenders were able to psychologically adjust to prison life, which includes the probability of developing feelings of negative affect, being treated for a mental disorder, and exhibiting symptoms or signs of mental disorders during incarceration.

Negative Affect. While null model for negative affect revealed that a significant amount of variation in the negative affect factor is explained by the level-2 units (V.C. = .233; S.D. = .483; $p < .01$), the slope of the white-collar offender variable is not contingent upon prison type ($p = .100$). Results for the Poisson fixed effects model are presented in Table 4.6. Contrary to the logic of the special sensitivity hypothesis, white-collar offenders were no more likely than other inmates to develop feelings of negative affect while incarcerated.

Not surprisingly, inmates who reported a history of mental health disorder (B = 1.16; $p < .001$), had been arrested six more times (B = .476; $p < .001$), and had a history of drug and alcohol abuse (B = .163; $p < .05$) were all more likely to report negative emotions.

Table 4.6. Poisson-Based Regression Predicting the Likelihood of Negative Affect for White-Collar Offenders: Offense-Based Definition.

Fixed Effects	**Negative Affect**	
	Coefficient	Standard Error
Intercept	-3.53***	.005
White-Collar Offender	.102	.148
Male	.039	.100
Age	-.041***	.004
Race/Ethnicity		
Black	.123	.077
Other	.087	.143
Hispanic	-.041	.110
Time in Prison	.000	.001
Criminal History		
Arrested 1-2	.156	.118
Arrested 3-5	.185	.114
Arrested 6+	.476***	.107
Correctional History	.119	.086
Employment Status	-.228**	.066
Alcohol/Drug History	.163*	.073
Mental Health History	1.16***	.075
Prison-Level		
Federal Institution	-.370**	.141

*p < .05; **p < .01; ***p < .001

Conversely, older inmates (B = -.041; $p < .001$) and inmates living in federal prisons (B = -.370; $p < .01$) were at reduced odds of experiencing emotional distress.

Mental Disorder Treatment. The null model for the mental disorder treatment index was significant (V.C. = .852; S.D. = .932; $p < .001$), while the random slopes model was not ($p > .500$). Thus, the results of the fixed effects ordinal logistic regression model are displayed in Table 4.7. As can be seen, white-collar inmates were no more likely than other inmates to score higher on the treatment index. This opposes the special sensitivity hypothesis, which holds that white-collar offenders should score higher on this scale, relative to other inmates.

As expected, mental health history was the strongest predictor of scoring higher on the treatment index (O.R. = .026; $p < .001$), followed by drug and alcohol history (O.R. = .783; $p < .01$) and age (.986; $p < .001$). Alternatively, male inmates (O.R. = 1.23; $p < .10$) and inmates who were employed before their incarceration (O.R. = 1.21; $p < .001$) were more likely to score lower on the scale.

Mental Disorder Symptoms. Results from the null model showed that significant variation in mental disorder symptoms exists at the prison level, (V.C. = .237; S.D. = .487; $p < .001$); however, the random slopes model indicated that the experience of mental disorder symptoms for white-collar offenders is not a function of prison type ($p = .196$). As such, Table 4.8 presents the findings from the fixed effects model. In line with the logic of the special sensitivity hypothesis, white-collar offenders had greater odds of scoring higher on the mental disorder symptoms index relative to other inmates, although the effects were marginally significant (O.R. = -.113; $p < .10$). Despite its marginal significance, this finding is important in that it challenges previous assertions made by Benson and Cullen (1988) regarding the relationship white-collar offenders and mental and emotional health in prison.

Table 4.7 Ordinal Logistic Regression Fixed Effects Model Predicting the Likelihood of Treatment for Mental Disorders for White-Collar Offenders: Offense-Based Definition.

Fixed Effects	**Mental Disorder Treatment Index**	
	Coefficient	Odds Ratio
Intercept	3.39***	29.7
White-Collar Offender	-.003	.996
Male	.208+	1.23
Age	-.013***	.986
Race/Ethnicity		
Black	-.005	.994
Other	.049	1.05
Hispanic	.163	1.17
Time in Prison	-.000	1.00
Criminal History		
Arrested 1-2	.081	1.08
Arrested 3-5	.194	1.21
Arrested 6+	.196	1.21
Correctional History	-.086	.916
Employment Status	.198**	1.21
Alcohol/Drug History	-.244**	.783
Mental Health History	-.363***	.026
Prison-Level		
Federal Institution	.017	1.19
Threshold (d1)	2.18***	8.86

+p < .10; *p < .05; **p < .01; ***p < .001

The model also shows that the experience of mental health disorder symptoms in prison is influenced by several other predictors. On the one hand, relative to younger inmates, older inmates exhibited fewer symptoms of disorder and were thus more likely to score lower on the index (O.R. = 1.01; $p < .001$). A similar trend held for male inmates, who had increased odds of scoring lower on the index, compared to female inmates (O.R. = 1.32; $p < .001$). On the other hand, black inmates (O.R. = .748; $p < .001$) and inmates from other racial backgrounds (O.R. = .896; $p < .05$) had a greater likelihood of scoring higher on the scale, compared to white inmates. Not surprisingly, a history of mental health disorder was the strongest predictor of scoring high on the mental disorder symptom index (O.R. = .255; $p < .001$). Inmates who reported a history of drug and alcohol abuse (O.R. = .819; $p < .001$) and inmates who had spent time in another correctional facility prior to their most recent admission (O.R. = -.091; $p < .05$) also had greater odds of scoring higher on the scale. Finally, compared to inmates serving time in state facilities, inmates housed in federal prisons were more likely to score lower on the index (O.R. = 1.25; $p < .001$).

Prison Program Participation

As was the case for the previous models in this study, the null model revealed that a significant amount of variation in prison program participation is left to be explained at the prison level (V.C. = .626; S.D. = .791; $p < .001$) while the random slopes model suggested that the extent to which white-collar offenders participate in prison programs is not contingent upon the type of prison in which they are housed ($p > .500$). The fixed effects model, which estimates the probability of prison program participation, is presented in Table 4.9. In support of the special resiliency hypothesis, the model shows that white-collar offenders were more

Table 4.8. Ordinal Logistic Regression Fixed Effects Model Predicting the Likelihood of Mental Disorder Symptoms for White-Collar Offenders: Offense-Based Definition.

Fixed Effects	**Mental Disorder Symptoms Index**	
	Coefficient	Odds Ratio
Intercept	-.089**	.914
White-Collar Offender	-.113+	.892
Male	.282***	1.32
Age	.013***	1.01
Race/Ethnicity		
Black	-.289***	.748
Other	-.109*	.896
Hispanic	.039	1.03
Time in Prison	-.000	.999
Criminal History		
Arrested 1-2	-.016	.983
Arrested 3-5	.003	1.00
Arrested 6+	.021	1.02
Correctional History	-.091*	.913
Employment Status	.016	1.01
Alcohol/Drug History	-.199***	.819
Mental Health History	-1.36***	.255
Prison-Level		
Federal Institution	.226***	1.25
Threshold (d1)	1.25***	3.49
Threshold (d2)	3.36***	28.9

+p < .10; *p < .05; **p < .01; ***p < .001

likely than other inmates to score higher on the program participation scale (O.R. = .855; $p < .05$).

Regarding the other predictors of program participation, older inmates were more likely than younger inmates to score lower on the index and were thus less likely to participate in prison programs (O.R. = 1.04; $p < .05$). Inmate race and ethnicity were also significant predictors of participation: Compared to white inmates, black inmates were more likely to score higher (O.R. = .716; $p < .001$) while Hispanic inmates were more likely to score lower, compared to non-Hispanics (O.R. = 1.13; $p < .05$). Relative to female inmates, male inmates had a greater probability of scoring on the low end of the scale (O.R. = 1.44; $p < .01$). Interestingly, inmates with a history of mental health disorder (O.R. = .826; $p < .01$) and inmates with a history of drug and alcohol abuse (O.R. = .512; $p < .001$) had an increased likelihood of scoring higher on the program index. Participation in prison programs is also negatively influenced by criminal history, but only for inmates who were arrested more than six times (O.R. = 1.25; $p < .001$). Lastly, inmates who were employed before their most recent incarceration (O.R. = .844: $p < .001$), inmates who had been in prison for longer periods of time (O.R. = .998; $p < .10$), and inmates living in federal facilities (O.R. = .685; $p < .001$) were all more likely to score higher on the scale.

SUMMARY: OFFENSE-BASED DEFINTION OF WHITE-COLLAR CRIME

With the exception of mental disorder symptoms, the special sensitivity hypothesis is not supported. Across most domains of prison life, white-collar offenders did not differ significantly from other inmates. In some instances, white-collar offenders appeared to fare better: Compared to other inmates, they were (1) more likely to score lower on the drug and alcohol infraction

Table 4.9. Ordinal Logistic Regression Fixed Effects Model Predicting the Likelihood of Prison Program Participation for White-Collar Offenders: Offense-Based Definition.

Fixed Effects	**Prison Program Participation Index**	
	Coefficient	Odds Ratio
Intercept	1.17***	3.21
White-Collar Offender	-.156*	.855
Male	.368**	1.44
Age	.004*	1.00
Race/Ethnicity		
Black	-.333***	.716
Other	.051	.949
Hispanic	.128*	1.13
Time in Prison	-.001+	.998
Criminal History		
Arrested 1-2	.017	1.01
Arrested 3-5	.056	1.05
Arrested 6+	.226***	1.25
Correctional History	-.006	.993
Employment Status	-.169***	.844
Alcohol/Drug History	-.669***	.512
Mental Health History	-.190***	.826
Prison-Level		
Federal Institution	-.376***	.685
Threshold (d1)	1.71***	5.56

+p < .10; *p < .05; **p < .01; ***p < .001

index, (2) less likely to possess a weapon, (3) less likely to be involved in physical and verbal altercations with prison staff, and (4) more likely to score higher on the program participation index.

Several other variables in the model were also significant and consistent predictors of prison adjustment across the four domains of prison life. Relative to female inmates, male inmates were more likely to experience both types of victimization, be written up for drug and alcohol infractions, be in possession of weapons and other illegal contraband, be verbally and physically assault prison staff, and be disciplined for violating the rules. Conversely, older inmates were less likely to be victimized, be in possession of illegal contraband, physically and verbally assault prison staff and other inmates, receive disciplinary action, have feelings of negative affect, receive treatment for mental disorders while incarcerated, exhibit symptoms of mental disorder, and to participate in prison programs. The findings for race and prison adjustment appear mixed: One the one hand, black inmates were less likely to experience minor and serious victimization and to be in possession of illegal contraband; on the other hand, they were more likely to verbally and physical assault correctional staff and other inmates, be disciplined for violating the rules, exhibit symptoms of mental disorder, and participate in prison programs.

Time in prison was a significant predictor across most domains, as inmates who were incarcerated for longer periods of time were slightly more likely to experience both forms of victimization, to be found guilty of drug and alcohol infractions, possess a weapon or other illegal contraband, verbally and physically assault prison staff and other inmates, and to receive disciplinary action. In the same way, inmates with at least one arrest prior to their current admission (i.e., all arrest categories examined except the reference group) were more likely to be

written up for drug and alcohol infractions, in possession of a weapon, and receive disciplinary action. They were also more likely show signs of negative affect and less likely to participate in prison programs, although this was observed only for inmates who had six or more arrests prior to their current admission. Correctional history also influenced the extent to which inmates were able to adapt to their incarceration. Specifically, inmates who had spent time in another facility prior to their current admission were more likely to use drugs and alcohol, possess illegal contraband, verbally and physically assault correctional staff and other inmates, receive disciplinary action, and show signs of mental disorder.

Across most domains, employment status had a positive influence on prison adjustment. Inmates who were employed before their current incarceration were less likely to use drugs and alcohol, have other illegal contraband, verbally and physically assault prison staff and fellow inmates, be disciplined for violating the rules, report feelings of negative affect, and receive treatment for mental disorders. They were also more likely to participate in prison programs during their incarceration. Like inmate race, the observations for inmates with a history of drug and alcohol use are mixed. On the one hand, they had reduced odds of experiencing serious victimization and more likely to participate in prison programs. Conversely, they were at greater odds of being found guilty of drug and alcohol violations, possessing illegal contraband, receiving disciplinary action, showing signs of negative affect, as well as exhibiting symptoms of—and receiving treatment for—mental disorders.

Lastly, mental health history and prison type were the most consistent predictors of prison adjustment across all domains. For instance, inmates with a history of mental health disorder were more likely to experience both forms of victimization, possess weapons and other illegal items, verbally and physically abuse staff and other inmates, be disciplined for rule

violations, report feelings of negative affect, show signs of—and receive treatment for—mental disorders, and participate in prison programs. Alternatively, inmates residing in federal correctional facilities had a reduced likelihood of experiencing either type of victimization, possessing illegal contraband, verbally and physically assaulting prison staff and other inmates, receiving disciplinary action, reporting feelings of negative affect, or showing signs of mental disorder. They were also significantly more likely to participate in prison programs, compared to inmates living in state facilities.

SINGLE-LEVEL ANALYSES USING THE OFFENDER-BASED DEFINITION

The findings from the multilevel analyses are consistent with those of Stadler et al. (2013), who also used an offense-based definition as the basis for identifying white-collar offenders in prison. As discussed in the previous chapter, however, they did not incorporate measures of social status into their analyses. Because social status is a fundamental component of the special sensitivity hypothesis, and because no widespread definition of white-collar crime exists currently among scholars, it is essential to consider status-based indicators in addition to the characteristics of the offense when looking at incarcerated white-collar offenders. Thus, the following section includes offender-based characteristics into the definition of white-collar crime and analyzes them with respect to experiencing the four domains of prison life. This makes it possible to examine the extent to which income and education influence the likelihood of white-collar offenders being especially sensitive or resilient to the selected prison outcomes.

As previously mentioned, the subsample of white-collar offenders who fit this definition is small (n=132) and, as such, they must be compared to a random sample of inmates from the general prison population (n = 1,090). This small sample size prohibits the use of multilevel modeling due to a lack of variation in the dependent variables across level-2 units. To remedy

this issue, single-level logistic and ordinary least squares (OLS) regression models were estimated which use Huber-White corrected standard errors (i.e., Stata's Robust Cluster Option) to account for the possible dependence of observations of inmates clustered into 326 prisons. Similar to the rationale for controlling for prison type at the aggregate-level in a multilevel model, this option factors in the possibility that inmates from the same prison might be more alike than inmates across different prisons. If left uncorrected, this could bias the standard errors of the estimates. It is important to reiterate that, due to a manipulation in Stata's default setting with respect to reference categories, the coefficients and odds ratios for the ordinal scales are interpreted differently than for the HLM results. Unlike HLM, Stata creates odds ratios with the higher numbers in the numerator. For example, whereas "traditional" ordinal regression creates p1/p(2 or 3) and p(1 or 2)/p3, Stata uses p3/p(1 or 2) and p(2 or 3)/p1. Thus, positive coefficients and odds ratios greater than one correspond with an increased likelihood of scoring higher on the index, while negative coefficients and odds ratios less than one correspond with a decreased likelihood of scoring higher on the index. The following sections describe only the effect of the white-collar offender variable for each prison outcome, since the coefficients of the other predictors of prison adjustment did not significantly change when using the offender-based definition.

Victimization

Multinomial logistic regression was used to estimate the effects of the white-collar offender variable and other predictors of adjustment on the likelihood of experiencing minor and serious victimization in prison (versus no victimization). As can be seen in Table 4.10, white-collar offenders were no different from other inmates with respect to either type of victimization. This runs counter to the logic of the special sensitivity hypothesis and yields similar results to the

Table 4.10. Multinomial Logistic Regression Estimating the Likelihood of Experiencing Minor and Serious Victimization Versus no Victimization for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Minor Victimization		Serious Victimization	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
White-Collar Offender	-.088	.915	.365	1.44
Male	.993**	2.70	1.16**	3.44
Age	-.023**	.976	-.005*	.970
Race/Ethnicity				
Black	-.159*	.852	-.285*	.751
Other	.492	1.63	.284	1.32
Hispanic	-.143	.866	-.755	.469
Time in Prison	.003*	1.00	.004*	1.00
Criminal History				
Arrested 1-2	.070	1.07	-1.32	.876
Arrested 3-5	-.032	.996	.081	1.08
Arrested 6+	.166	1.18	.355	1.30
Correctional History	.116	1.12	.398	1.48
Employment Status	-.144	.865	-.465	.627
Alcohol/Drug History	-.025	.989	-.281*	.681
Mental Health History	.881***	2.41	.920**	2.51
Federal Institution	-.398**	.671	-1.08*	.339
Intercept	-.218***	.112	-.279***	.061

+p< .10; *p < .05; **p<.01; ***p<.001

previous multilevel victimization models which used the offender-based definition of white-collar crime. Beyond the effects of offender status, the data in Table 4.10 show that victimization was higher among men, younger inmates, those who have been incarcerated for longer periods of time, and those with a history of mental health disorders, but lower for inmates residing in federal facilities.

Prison Conduct

A series of ordinal and multinomial logistic regression models were used to assess the extent to which white-collar offenders break the rules and receive discipline as a result of their misconduct. The results from Tables 4.11, 4.12, and 4.13 indicate that white-collar offenders were no more or less likely than other inmates to be written up for—or found guilty of—using drugs or alcohol, engaging in property-related misconducts, and being verbally and physically confrontational toward correctional staff and other inmates. Table 4.14 shows that white-collar offenders were also no more or less likely than other inmates to be disciplined for rule violations. Again, these results contradict the logic of the special sensitivity hypothesis, although they differ from the multilevel analyses using the offense-based definition, whereby white-collar offenders were *less* likely than other inmates to use drugs or alcohol, to carry a weapon, and to be verbally and physically combative toward prison staff.

Additionally, these tables show that male inmates were more likely to use drugs and alcohol, possess weapons and other illegal items, verbally and physically assault prison staff, and receive disciplinary action. Younger inmates were less likely to possess illegal contraband, verbally and physically assault correctional staff and other inmates, and be disciplined for rule violations. Black inmates had increased odds of possessing illegal contraband, coming into

Table 4.11. Ordinal Logistic Regression Predicting the Likelihood of Drug and Alcohol Infractions for White-Collar Offenders: Offender-Based Definition (n = 1, 222).

Independent Variable	Drug and Alcohol Infraction Index	
	Coefficient	Odds Ratio
White-Collar Offender	.183	1.20
Male	2.16**	8.69
Age	.006	1.00
Race/Ethnicity		
Black	-1.26	1.12
Other	.439	1.26
Hispanic	-.798+	.450
Time in Prison	.010**	1.01
Criminal History		
Arrested 1-2	.440*	1.55
Arrested 3-5	.633+	1.88
Arrested 6+	.245	1.21
Correctional History	.147*	1.15
Employment Status	-.224*	.798
Alcohol/Drug History	.356+	1.42
Mental Health History	.538	1.40
Federal Institution	-1.47	.862
Threshold (d1)	5.05	.933
Threshold (d2)	7.30	.971

+p < .10; *p < .05; **p < .01; ***p < .001

Table 4.12. Multinomial Logistic Regression Models Predicting the Likelihood of Possessing Weapons and Illegal Contraband versus No Infraction for White-Collar Offenders: Offender-Based Definition (n =1,222)

Independent Variable	Weapon Possession		Other Illegal Contraband	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
White-Collar Offender	-1.34	.261	.141	1.15
Male	1.99*	7.14	.521+	1.68
Age	.000	1.00	-.001*	.998
Race/Ethnicity				
Black	.193	1.21	-.371*	.689
Other	-.303	.738	-.203	.816
Hispanic	.269	1.30	-.163*	.849
Time in Prison	.007*	1.00	.006+	1.00
Criminal History				
Arrest 1-2	.320*	1.32	-.240	.786
Arrest 3-5	.555*	1.56	-.127	.879
Arrest 6+	.064	1.07	-.063	.938
Correctional History	.581	1.14	.329+	1.39
Employment Status	-.005*	.996	.036	1.03
Alcohol/Drug History	-.369	.690	.391+	1.47
Mental Health History	1.01**	3.01	.294+	1.34
Federal Institution	.062	1.06	-1.24**	.288
Intercept	-3.47***	.024	-.236***	.093

+p<.10; * p < .05; ** p < .01; *** p < .001

Table 4.13. Multinomial Logistic Regression Predicting the Likelihood of Verbal and Physical Misconduct Toward Staff and Other Inmates versus No Misconduct for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Prison Staff		Other Inmates	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
White-Collar Offender	-.396	.651	.518	1.67
Male	1.77+	5.90	.538	1.71
Age	-.005*	.994	-.002*	.997
Race/Ethnicity				
Black	.991+	2.69	.518+	1.67
Other	-.125	.881	.201	1.11
Hispanic	.504	1.65	.491	1.63
Time in Prison	.010**	1.01	.007+	1.00
Criminal History				
Arrested 1-2	-.314	.729	.818	2.26
Arrested 3-5	-.653	.520	.095	1.10
Arrested 6+	-.846	.429	.555	1.74
Correctional History	.1.14*	3.15	.461+	1.58
Employment Status	- .041*	.951	-.255*	.774
Alcohol/Drug History	-.421	.656	-.569	.565
Mental Health History	1.39**	4.04	.792*	2.20
Federal Institution	-1.62+	.196	-1.65*	.190
Intercept	-5.94***	.002	-4.31***	.013

+p<.10; *p < .05; **p < .01; ***p < .001

Table 4.14. Ordinal Logistic Regression Predicting the Likelihood of Disciplinary Action for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Disciplinary Action Index	
	Coefficient	Odds Ratio
White-Collar Offender	-.238	.787
Male	.872***	2.39
Age	-.016**	.983
Race/Ethnicity		
Black	.077*	1.08
Other	-.071	.930
Hispanic	-.364+	.694
Time in Prison	.000	1.00
Criminal History		
Arrested 1-2	.472*	1.60
Arrested 3-5	.438*	1.55
Arrested 6+	.257	1.37
Correctional History	.121+	1.12
Employment Status	-.010+	.989
Alcohol/Drug History	.044*	1.04
Mental Health History	.169*	1.18
Federal Institution	-.222+	.800
Threshold 1	1.63	.374
Threshold 2	3.43	.394
Threshold 3	5.39	.515

+p < .10; *p < .05; **p < .01; ***p < .001

action. Inmates incarcerated for longer periods of time also had a greater likelihood of using drugs and alcohol, carrying weapons and other illegal contraband, as well as verbally and physically assaulting staff and fellow inmates. Criminal history had an overall negative effect on prison misconduct: Inmates arrested at least one time prior to their most recent admission were more likely to use drugs and alcohol, have weapons, and be disciplined by prison staff. Inmates who had previously spent time in another facility were more likely to be written up for drug and alcohol violations, possessing illegal contraband, being verbally and physically confrontational toward prison staff and other inmates, and receiving disciplinary action.

Similar patterns held for inmates with a history of drug and alcohol abuse, with the exception of conflicts with staff and other inmates. Finally, inmates who were employed before their incarceration and inmates residing in federal institutions were less likely to be found guilty of any misconduct and to receive disciplinary action; conversely, with the exception of drug and alcohol use, inmates with a history of mental health problems were more likely to be found guilty of property and physical misconduct and to receive disciplinary action.

Psychological Adjustment

Ordinal logistic and OLS regression models were used to examine the degree to which white-collar offenders were able to psychologically adapt to their incarceration. Tables 4.15, 4.16, and 4.17 show no differences between white-collar offenders and other inmates were observed regarding psychological adjustment to prison life. Specifically, white-collar offenders were no more or less likely than other inmates to (1) show signs of negative affect, including feelings of anger and revenge; (2) to receive treatment for mental health disorders or to be admitted to a mental health hospital while incarcerated; or (3) to show signs of mental health disorder, including symptoms of hopelessness, paranoia, and delusions.

Table 4.15. OLS Regression Predicting the Likelihood of Negative Affect for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Negative Affect	
	Coefficient	Standard Error
White-Collar Offender	-.009	.014
Male	.014	.013
Age	-.001**	.000
Race/Ethnicity		
Black	-.002	.011
Other	-.039	.011
Hispanic	-.001	.014
Time in Prison	-.000	.000
Criminal History		
Arrested 1-2	-.013	.012
Arrested 3-5	.028	.016
Arrested 6+	.019+	.017
Correctional History	.015	.018
Employment Status	-.008+	.013
Alcohol/Drug History	.002+	.010
Mental Health History	.042**	.014
Federal Institution	-.008*	.012
Intercept	.066**	.024

+p<.10; *p < .05; **p < .01; ***p < .001

Table 4.16 Ordinal Logistic Regression Predicting the Likelihood of Treatment for Mental Disorders for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Mental Disorder Treatment Index	
	Coefficient	Odds Ratio
White-Collar Offender	.140	1.15
Male	-.093+	.910
Age	.008*	1.00
Race/Ethnicity		
Black	.279	1.32
Other	.790	2.20
Hispanic	-.418	.658
Time in Prison	.002	1.00
Criminal History		
Arrested 1-2	-.013	.986
Arrested 3-5	-.180	.835
Arrested 6+	-.284	.752
Correctional History	.281	1.32
Employment Status	-.478*	.619
Alcohol/Drug History	.172*	1.18
Mental Health History	3.34***	28.4
Federal Institution	-.074	.928
Threshold 1	4.04	.581
Threshold 2	5.87	.595

+p < .10; *p < .05; **p < .01; ***p < .001

Table 4.17. Ordinal Logistic Regression Predicting the Likelihood of Mental Disorder Symptoms for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Mental Disorder Symptoms Index	
	Coefficient	Odds Ratio
White-Collar Offender	-.269	.892
Male	-.351**	.699
Age	-.019**	.981
Race/Ethnicity		
Black	.300**	1.35
Other	.167	1.18
Hispanic	.050	1.05
Time in Prison	-.002	.997
Criminal History		
Arrested 1-2	-.192	.825
Arrested 3-5	-.113	.892
Arrested 6+	-.282	.753
Correctional History	.133*	1.14
Employment Status	-.013	.986
Alcohol/Drug History	.380**	1.46
Mental Health History	1.41***	4.10
Federal Institution	-.159*	.852
Threshold (d1)	-.485	.295
Threshold (d2)	.823	.293
Threshold (d3)	2.94	.304

+p < .10; *p < .05; **p < .01; ***p < .001

While these findings challenge the special sensitivity hypothesis, they differ slightly from the analyses using the offense-based definition, which partially supports the idea that white-collar offenders have increased odds of exhibiting symptoms of mental disorder while incarcerated.

Beyond the effects of offender status, the tables also indicate that male inmates were less likely to exhibit symptoms of—and receive treatment for—mental disorders. Alternatively, older inmates were more likely to show symptoms of disorder and to receive treatment, but less likely to report feelings of negative affect. Black inmates and inmates who had been incarcerated previously had greater odds of exhibiting symptoms of mental disorder, while inmates who were employed prior to their incarceration had reduced odds of reporting feelings of negative affect, showing signs of mental disorder, and receiving treatment. Inmates with a history of mental health disorder and inmates with a history of drug and alcohol abuse were more likely to report negative emotions and to show symptoms of—and receive treatment for—mental health problems. Lastly, inmates living in federal prisons had a reduced likelihood of reporting feelings of negative affect and showing signs of mental disorder.

Prison Program Participation

Finally, ordinal logistic regression models were used to estimate the likelihood of white-collar offenders participating in prison programs. Consistent with the previous models for the offender-based definition, Table 4.18 shows no support for the special sensitivity hypothesis, as white-collar offenders were no more or less likely than other inmates to participate in prison programs, including life skills classes and employment counseling. However, this finding stands in contrast to the multilevel analyses using the offense-based approach, which supports the notion of special resiliency by suggesting that white-collar offenders are significantly more likely than other inmates to score higher on the program index.

Table 4.18. Ordinal Logistic Regression Predicting the Likelihood of Prison Program Participation for White-Collar Offenders: Offender-Based Definition (n = 1,222).

Independent Variable	Prison Program Participation Index	
	Coefficient	Odds Ratio
White-Collar Offender	.185	1.20
Male	-.527**	.590
Age	-.000+	.999
Race/Ethnicity		
Black	.119*	1.12
Other	-.440	.643
Hispanic	.104+	1.10
Time in Prison	-.003	.996
Criminal History		
Arrested 1-2	-.195	.822
Arrested 3-5	-.275	.759
Arrested 6+	-.242*	.785
Correctional History	-.276	.758
Employment Status	.252+	1.28
Alcohol/Drug History	.925***	2.52
Mental Health History	.382*	1.48
Federal Institution	.384*	1.46
Threshold (d1)	1.14	.371
Threshold (d2)	2.77	.382

+p < .10; *p < .05; **p < .01; ***p < .001

For the other predictors of adjustment, males, older inmates, and those who had been arrested six or more times were less likely to participate in prison programs. Alternatively, blacks, inmates with a history of mental health disorder, inmates with a history of substance abuse, and inmates housed in federal facilities were more likely.

SUMMARY: OFFENDER-BASED DEFINITION OF WHITE-COLLAR CRIME

Similar to the multilevel analyses using the offense-based definition of white-collar crime, the analyses using the offender-based approach suggest that white-collar offenders are no different from other inmates with respect to the selected prison outcomes. This observation is important for at least three reasons. First, it conforms to the findings of past research (Benson & Cullen, 1988; Stadler et al., 2013) and challenges the notion that white-collar offenders are especially sensitive to the prison experience. Second, the results are consistent across different prison samples collected at different periods of time. Finally, there is much disagreement among white-collar crime scholars about which definition is best and these analyses indicate that—regardless of classification—the experiences of each group are, for the most part, uniform. These points are discussed in greater detail in the following chapter, along with the policy implications of the current study, its limitations, and directions for future research in the study of incarcerated white-collar offenders.

CHAPTER 5

DISCUSSION

Over the past few decades, there has been a surge in both the number of white-collar offenders sentenced to prison and support from the general public regarding their incarceration (Cullen et al., 2008; Higgins, 1999). However, very little is known about what happens to these individuals once they end up behind bars. The purpose of the current study was to examine the experience of incarcerated white-collar offenders from two competing perspectives: the special sensitivity hypothesis and the special resiliency hypothesis.

The notion of special sensitivity is predicated on the fact that white-collar criminals comprise a special subgroup of the offender population, whose social background characteristics and lack of familiarity with the criminal justice system make them particularly vulnerable to the pains of imprisonment (Mann et al., 1979; Payne, 2003; Pollack, 1983; Renfew, 1977; Wheeler et al., 1988b). Alternatively, proponents of the special resiliency perspective maintain that the background characteristics associated with many white-collar offenders may actually serve as assets inside prison, as a number of these traits have been individually linked to successful adjustment to prison life in other studies (Benson & Cullen, 1988b; Gendreau et al., 1997; Stadler et al., 2013; Wooldredge, 1999).

To date, however, little has been done to assess the validity of either perspective and most of the information on white-collar inmates comes from either qualitative, anecdotal accounts or analyses based on small, non-representative prison samples (Mann et al., 1979; Payne, 2003; Stadler et al., 2013; Wheeler et al., 1988b). Importantly, the most rigorous (and only) attempt to empirically study the prison experience of white-collar offenders did so using an offense-based definition of white-collar crime—the merit of which has been hotly debated

among scholars in the field (Benson & Simpson, 2015; Felson, 2002; Sutherland, 1949/1983; Stadler et al., 2013). Critics of the offense-based approach claim that researchers often "miss the mark" by focusing only on the nature of the illegal act—instead of the offender's characteristics—which essentially "widens the net" to include any number of individuals convicted of low-level crimes, such as fraud, forgery, and embezzlement (Braithwaite, 1985; Felson, 2002). As Sutherland (1949/1983) and others have argued, offender characteristics are a fundamental component of the definition of white-collar crime because they permit researchers to examine the degree to which certain features, such as social status, influence the reactions of the criminal justice system (see also Benson & Simpson, 2015). They also provide a rationale for judges and others who push the idea of special sensitivity to contend that prisons, which house mostly lower-class offenders convicted of street crimes, are not suitable facilities for white-collar offenders, who are otherwise upstanding members of the community with "more to lose" (Wheeler et al. 1988b).

Thus, research on incarcerated white-collar offenders is both scant and incomplete, since no attempts have been made to study individuals who rank high on indicators of social status and who also commit crimes during the course of their occupation. This study extends the knowledge base regarding incarcerated white-collar offenders in two ways. First, it builds on the previous research of Stadler et al. (2013), and ultimately the work of Benson and Cullen (1988), by examining a prison sample that is larger, nationally representative, and from a more recent era. Second, it includes both offense- *and* offender-based definitions of white-collar crime to determine whether or not different definitions affect the determinants of the various indicators of prison adjustment.

This chapter discusses the findings of the current study in terms of their implications for both theory and policy. Limitations are also discussed and a direction for future research on incarcerated white-collar offenders is presented. Next, the relevance of other predictors of prison adjustment from this study is considered. Finally, this study concludes with remarks about adaptation to incarceration and the importance of understanding the experiences of those who end up behind bars.

ASSESSING THE SPECIAL SENSITIVITY AND SPECIAL RESILIENCY HYPOTHESES

Are White-Collar Offenders More Sensitive to Prison?

This study used two definitions of white-collar crime to examine the experience of white-collar offenders housed in both state and federal correctional facilities. The first definition is congruent with the offense-based approach to studying white-collar crime and emphasizes non-physical, illegal acts committed during the course of one's occupation by way of deception in order to obtain personal or financial gain (Edelhertz, 1970). Individuals in this group were those whose crimes were profit motivated property offenses that were facilitated by specialized access provided to them by their jobs or education. The second definition is in line with the offender-based approach because it includes measures of social status, in addition to the established criteria for the offense-based group. Inmates in this category were those whose crimes were motivated by profit and enabled by access to some type of criminal opportunity within their occupation but who also ranked high on measures of social status, including income and level of education. The study's findings are summarized in Table 5.1, which includes the results for both groups of offenders in relation to the domains of prison life that were examined. As can be seen, white-collar offenders, for the most part, are not more sensitive to prison and did not fare worse

Table 5.1. Comparison of Different Definitions of White-Collar Offending across Prison Outcomes (non-white-collar offenders are the reference categories).

	White-Collar Offender	
Prison Outcomes	Offense-Based Definition	Offender-Based Definition
Victimization		
Minor	×	×
Serious	×	×
Drug and Alcohol Infraction Index	—	×
Property Misconduct		
Weapon	—	×
Other Contraband	×	×
Verbal/Physical Misconduct		
Staff	—	×
Inmate	×	×
Disciplinary Action Index	×	×
Psychological Adjustment		
Negative Affect	×	×
MDO Treatment Index	×	×
MDO Symptoms Index	+	×
Prison Program Participation Index	+	×

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

than other inmates across the various outcomes. These findings challenge the commonly held assumptions of judges and other members of the criminal justice system that the conditions which characterize prison life are more stressful and difficult for white-collar offenders (Mann et al., 1979; Wheeler et al., 1988b). Based on these observations, the special sensitivity hypothesis is, for the most part, not supported, *irrespective of the definition used*. In Chapter 1 it was discussed that the defining features of white-collar crime have been heavily debated among criminologists to the point where no widespread definition currently exists (Braithwaite, 1985; Edelhertz, 1970; Felson, 2002; Sutherland, 1983). It was also contended in this chapter that the way in which white-collar crime is defined has a marked impact on who is considered a white-collar offender and what conclusions can be drawn about white-collar offending. However, this argument might need to be reconsidered—at least in the context of studying incarcerated white-collar offenders.

For example, it could be that indicators of social status used in the current study do not have as much of an influence for white-collar offenders in prison as they do in other areas of the criminal justice system, such as plea bargaining (Albonetti, 1998). As Pare and Logan (2011) noted, prior income might not necessarily be indicative of social status in prison because it cannot easily be used to avoid some of the more negative outcomes associated with prison life. Middle-class inmates cannot hide in gated communities once they are incarcerated and they cannot use their money to influence others inside the prison. Instead, it might be the *type* of crime committed (i.e., white-collar versus street crime) that has the greatest impact on prison adjustment, since it is—at least in part—reflective of a criminal skillset that may be conducive to the prison environment. These points are discussed in greater detail below regarding the theoretical implications of the current study and again in its limitations.

The only outcome on which white-collar offenders scored higher than other inmates was mental disorder symptoms, including feelings of hopelessness, paranoia, and delusions. Although the relationship between the white-collar offender variable and the mental disorder symptoms variable reached marginal significance ($p<.10$), this observation is important and corresponds with the notion that prison poses challenges to incarcerated white-collar offenders, who may feel overwhelmed at times due the stark contrast in living arrangements (Payne, 2003; Stadler et al., 2013). As Payne (2003) noted, once incarcerated, many white-collar offenders give up on all hope for the future and see their lives as bleak and devoid of meaning. In addition to losing their jobs and status within the community, then, it may be that a prison sentence impacts the psyche of white-collar offenders to a greater degree than other inmates. Paraphrasing Payne (2003), it may be that the "fall from grace" is greater for white-collar offenders and that a prison sentence serves as a reminder that their lives have irrevocably changed for the worse. It could also be that white-collar offenders, as Benson (1985a) suggested, "deny their guilty mind" and do not see their actions as criminal. To the extent that this is true, they may view their incarceration as unjustified and may be more resentful, paranoid, or distrustful of the criminal justice system than other inmates. Conversely, white-collar offenders appeared to fare better than their non-white-collar counterparts in some instances, but only when they are identified using the more inclusive offense-based definition. They were less likely to be written up for drug and alcohol violations, weapon possession, coming into conflict with prison staff, and were more likely to participate in prison programs—all of which lend partial support to the notion that white-collar offenders may possess a sort of special resiliency when it comes to living in prison (Benson & Cullen, 1988).

Theoretical Implications

What is it about white-collar offenders that might make them more resilient to some of the pains of imprisonment? In line with importation theories of prison adjustment, which argue that inmate behaviors in prison are an extension of more general behavior patterns outside of prison, the results suggest that white-collar offenders may import a different set of skills and values into prison—which may include the ability to regulate their emotions better than other inmates. As Benson and Cullen (1988) noted, emotional regulation varies significantly by social class, and a number of middle- and upper-class occupations often require employees to engage in "emotion work" in order to be successful in their jobs. To the extent that white-collar offenders are better at controlling their feelings, they may also have a more cooperative disposition toward others when it comes to the daily routines of prison life, which may work to reduce their institutional pains (Irwin & Cressy, 1962). Furthermore, the crimes for which they were incarcerated involved violations of trust and were carried out using some form of deception. Unlike other offenders who are incarcerated for violent crimes and may be predisposed to aggressive behaviors, the crimes of white-collar offenders are characterized by non-physical acts involving misdirection and persuasion. This criminal skillset may translate well in the prison context. Thus, white-collar offenders may also be more cunning or manipulative than other inmates when it comes to navigating prison life.

Previous research supports this logic. Studies on the psychology of white-collar crime, for example, indicate that white-collar offenders may be more socially extroverted than other offenders. In his examination of the traits most associated with economic crime, Feely (2006) described the "positive extrovert"—a talkative, spontaneous, alert, manipulative, and egocentric individual who uses his friendliness and superior social skills to gain attention. Feely also noted

that individuals who fit into this category may aggressively lie and spread gossip as a method of goal attainment and fostering social connections. Similar patterns were observed by Ragatz, Fremouw, and Baker (2012) who reported that the white-collar offenders in their sample scored higher on measures of perceived social influence and other traits related to psychopathy, such as Machiavellian Egocentricity. Babiak, Neumann, and Hare (2010) also found that psychopathy was positively associated with charisma and presentation style (such as creativity and thinking) but negatively associated with perceptions of responsibility and performance (such as being a team player) among corporate professionals, which suggests that psychopathy is linked with the ability and intelligence to manipulate and deceive others (see also Perri, 2011).

To the extent that this is true, white-collar offenders may have an easier time ingratiating themselves among prison staff. Compared to other inmates, they may be more likely to keep to themselves in order to avoid unnecessary confrontations that might lead to sanctioning. As Clemmer (1940) noted, two important factors that facilitate successful assimilation into prison life are minding one's own business and remaining stoic. The results of the current study seem to reflect this, as white-collar offenders were significantly less likely to be found guilty of rule infractions regarding drugs and alcohol, weapon possession, and coming into verbal and physical conflict with the prison staff.

In addition, they were more likely to participate in prison programs geared towards improving life skills and securing employment. This corroborates with the previous work of Benson and Cullen (1988), who conducted in-depth interviews with a handful of white-collar offenders serving time in a federal penitentiary. As discussed earlier, a number of the interviewees in their study took great pride in displaying strict adherence to the bureaucratic rules of the prison system and complete deference to correctional authority in an effort to

distinguish themselves from other inmates—an observation which also corresponds with the idea that many white-collar offenders view themselves as being intrinsically different from, and socially superior to, their peers (Benson, 1985a; Stotland, 1977).

Also consistent with the importation perspective, participating in prison programs may represent a logical progression for white-collar inmates entering the correctional system. On the one hand, they may be more prosocial and regretful of the actions that led to their incarceration and participate as a way to show that they are contrite and capable of rehabilitation. For example, some research indicates that white-collar offenders are highly unlikely to commit new offenses once released from prison and under community supervision, and have better prospects of obtaining future employment than other offenders (Benson, 1985b; see also Benson & Moore, 1992). Research on the criminal trajectories of white-collar offenders also suggests that they follow different career paths than street criminals. As Weisburd and Waring (2001) observed, the onset of white-collar careers tends to start later in life, on average, than the careers of other offenders. Importantly, they noted that the majority of the white-collar offenders in their sample (approximately two-thirds) had fewer contacts with the criminal justice system, relative to other offenders—most of which were isolated, deviant acts brought on by either crisis or opportunity. This logic is partially substantiated by the fact that the white-collar offenders in the current study were more likely than other inmates to be serving time for their first offense. On the other hand, participation in prison programs has been positively associated with reduced sentences (Jacobs, 1982). It could be, as the literature on the psychology of white-collar offenders indicates, that these individuals engage in prison activities as a way to establish a rapport with correctional staff and receive good time by feigning interest in their desire to successfully reintegrate into society. Importation theorists would further maintain that participating in prison programs related to

securing employment may serve as a way for white-collar offenders—who were incarcerated because of crimes committed during the course of their occupation—to hone their criminal skills and further their own interests.

Likewise, from the perspective of control theorists, prison program participation—as well as the avoidance of sanctioning—may simply constitute analogous behaviors for white-collar offenders, who have (relatively) higher levels of self-control than other inmates and who would otherwise behave similarly outside of prison. In a discussion of self-control and white-collar offenders, Hirschi and Gottfredson (1993) once stated that, "In order to embezzle from banks, one needs to be first employed in one, a condition that depends in part on (high) self-control and its consequences" (p. 52). Borrowing from this logic, in order for white-collar offenders to successfully adapt to prison life, they must first refrain from activities (i.e., staff conflicts and rule infractions) that work to the detriment of their progress and engage in the activities that facilitate it (i.e., program participation), both of which require high levels of self-control.

In sum, the current study conforms to the results of prior studies (Benson & Cullen, 1988; Stadler et al., 2013) which fail to find substantial support for the special sensitivity hypothesis. Using data from a larger and more generalizable sample of offenders, collected at a different point in time, this study incorporated aspects of both offender- and offense-based definitions of white-collar crime and found that white-collar offenders, for the most part, fared no worse than other inmates across the various domains of prison life, regardless of how white-collar crime was defined. The only exception is that white-collar offenders appeared to be at greater risk of developing and exhibiting symptoms of mental disorder in prison when using the more inclusive offense-based definition. Also in line with previous research is the fact that the white-collar offenders in this study actually fared better than other inmates on certain outcomes, but only for

those inmates who were identified using the more inclusive offense-based definition (Stadler et al., 2013). As importation theorists would predict, it is possible that the observed differences in inmate adaptation are the result of pre-institutional characteristics, such as the personality traits commonly associated with white-collar criminals as well as their overall levels of self-control. Given what is presently known about the state of incarcerated white-collar offenders and the validity of the special sensitivity hypothesis, the implications for criminal justice policy are now discussed.

Policy Implications

There has been great debate over how to appropriately sanction white-collar offenders (Coffee, 1980; Geis, 1972; Hagan & Palloni, 1986; Kadish, 1963; Posner, 1980). Indeed, the special sensitivity hypothesis was founded on the argument that white-collar offenders are inherently different from other criminals and that these differences should be taken into account when deciding on an appropriate form of punishment. While a fundamental goal of sentencing is to promote general deterrence, past research indicates that the notion of special sensitivity has, at least in part, influenced the decisions of judges and other members of the criminal justice system regarding the practicality and effectiveness of certain punishments for white-collar offenders (Benson, 1985b; Benson & Cullen, 1988; Mann et al., 1979; Wheeler et al., 1988). However, the results of the current study and others similar to it (Stadler et al., 2013) suggest that this concern may be unwarranted.

The fact that white-collar offenders appeared to have fared no worse (with the exception of one outcome)—and, in some instances, fared better—than other inmates indicates that effects of general deterrence may be stronger in the population of potential white-collar offenders. As Braithwaite and Geis (1982) argued, white-collar offenders are more concerned than other

offenders about how they are perceived by others for their transgressions. Instead of embracing a criminal identity, then, they may respond to their incarceration in a manner that distinguishes them from other inmates because they are more "future-oriented" and place a greater emphasis on their status once they leave prison (Clinard & Meier, 1979). White-collar offenders may also be more easily deterred by a prison sentence because they do not have a commitment to crime as a way of life and the crimes for which they are incarcerated are the result of instrumental—as opposed to expressive—behaviors. Thus, they may be more amenable to control by prison policies which are based on the notion of general deterrence (Braithwaite & Geis, 1982).

It is true that prisons are difficult environments in which to live for all inmates, but the special sensitivity hypothesis rests on the assumption that white-collar offenders are *particularly* vulnerable to institutional pains. However, this logic is not empirically supported to date. This is an important finding, given the shift in how the general public views the severity of white-collar crime and the culpability of white-collar offenders, who are often seen as "bad guys" deserving of harsher sanctions (Cullen et al., 2008). Over the past few decades, flagrant instances of white-collar crime, including the BP oil spills in the Gulf Coast, the savings and loans debacle, and the downfall of the Enron Corporation, have drawn the ire of the public because of the enormous social and physical harms that were incurred as a result. People now want to see white-collar offenders held accountable for their actions, which may include serving lengthy prison sentences. With the knowledge that white-collar offenders are not likely to fare any worse than other inmates, judges may have an easier time in promoting general deterrence and achieving proportionality in punishment when rendering their decisions. Recent court decisions reflect this way of thinking, although they seem to apply only to those cases considered "high profile." As mentioned at the beginning of this study, there have been a number of cases

over the past few decades where heavy prions sentences have been leveed to white-collar offenders. For example, Bernard Madoff received a sentence of 150-years in 2008 for defrauding clients out of nearly $65 billon; former Enron executive Jeffery Skilling was given a 24-year sentence in 2006 for his role in the financial collapse of Enron; and former CEO and co-founder of WorldCom Bernard Ebbers was sentenced to 25-years in 2005 for mass fraud and conspiracy. But what about the white-collar offenders who pose a lesser threat to the general public? How should they be disciplined?

Just because white-collar offenders do not fare any worse than other inmates in prison does not necessarily mean they *should* be incarcerated. The criminal justice system in the United States has received heavy criticism from scholars, politicians, and the general public alike for having one of the highest prison populations in the world (Garland, 1996; Savelsberg, 1994; Simon, 2001; Wacquant, 2001), and adding low risk white-collar offenders to an already overcrowded prison population might create more problems than it solves. As discussed in Chapter 2, the effects of overcrowding on the welfare of inmates are well-documented (Lahm, 2008; Steiner & Wooldredge, 2009a; Wooldredge, 1997; Wooldredge, Griffin, & Pratt, 2001) and sweeping measures have already been implemented in certain states to mitigate its repercussions—for example, the California Department of Corrections and Rehabilitation's Public Safety Realignment initiative (Assembly Bill 109).

For these cases, it may be more productive to administer alternative forms of punishment, such as community supervision, to white-collar offenders. Although research in this area is scarce, some studies suggest that white-collar offenders are particularly suited to this type of non-custodial disposition. In his study of white-collar criminals serving community-based sanctions, Benson (1985b) noted that white-collar offenders constitute the "ideal" type of client

from the perspective of federal probation officers: They were compliant, employed, had family support, and were actively involved in the community. Instead of closely monitoring the white-collar offenders, whom they viewed as being highly unlikely to recidivate under their supervision, officers simply went "through the motions" in order to meet the agency's "formal requirements."

As one officer remarked:

> These people don't need supervision. Some of it is just chit-chat. I mean you know they are working. You kind of check in on the status of their life. How things are going at home and the job is basically it. It's not an in-depth counseling job (Benson, 1985b, p. 431).

In the words of another officer:

> We have to meet each other. I have certain responsibilities. We both know that it's just a formality, but we carry them out and that's that. This man, again, is in his sixties. His behavior patterns are well-established. He's not causing any problems for me. He's fully complying with the conditions of the probation I've asked him to comply with. He never really raises pressing personal problems of his own with me, and I guess I'm just kind of working along with him to maintain the status quo (Benson, 1985b, pp. 431-32).

Thus, from the officers' viewpoint, white-collar cases are favored over others because white-collar offenders, upon beginning the terms of their sanction, have already reached the point to which agencies wish to bring most clients.

Overall, the results of the current study do not yield definitive solutions for how the criminal justice system should deal with white-collar offenders; rather, the finding that white-collar offenders are not especially sensitive to the prison experience suggests that judges should

use their discretion and handle white-collar offenses on a case-by-case basis, which has become more informed by evidence-based practice over time. As such, for those who commit particularly egregious white-collar offenses, judges can draw from the research on the state of incarcerated white-collar offenders to guide their sentencing decisions so as to achieve proportionality without causing undue harm. It is important to note, however, that judges' decisions are tempered by the fact that sentencing guidelines at the federal level limit the amount of discretion they are able to exercise. Thus, such information may be more useful for correctional officers in their actuarial assessments of white-collar offenders convicted of less serious offenses and who have been disciplined with noncustodial sanctions, such as community supervision.

Limitations and Future Research

Although this study produced several important findings and has contributed to a better understanding of how white-collar offenders experience prison, it is not without limitations. To begin, the data upon which the analyses are based are secondary and were thus not originally created for the purpose of studying incarcerated white-collar offenders. Because of this, the study was not able to analyze important criteria—including specific offenses, such as embezzlement and fraud—that have served as the basis for identifying white-collar offenders in past research (Stadler et al., 2013; Wheeler et al., 1988a). Instead, it relied on more general questions that fit the offense-based description of white-collar crime (e.g., non-physical crimes carried out using deception and specialized access). A second and related limitation is that the data used in this study are cross-sectional. Indeed, the survey was administered across prisons at a single point in time with no follow-up interviews, which limits the possibility of studying white-collar offenders who are habitual or "career criminals." Future research on incarcerated

white-collar criminals should therefore include not only broad measures that serve as indicators of opportunity and specialized access during the course of one's occupation, but also those pertaining to specific white-collar offenses.

Analyzing incarcerated white-collar offenders also provides an incomplete picture of white-collar crime and the special sensitivity hypothesis more generally because it only examines those who were unable to avoid detection by the criminal justice system. For example, past research shows that the white-collar offenders who are able to circumvent prison sentences have a considerable amount of resources at their disposal—arguably more so than the white-collar offenders in the prison sample who scored highest on the measures of social status. As Albonetti (1998) noted, the complex nature of many white-collar crimes and the amount of social and financial capital to which white-collar offenders have access often forces prosecutors to compromise with defendants and have them "walk the court through" the intricacies of the offense in exchange for a reduced sentence, which is likely to be a non-custodial sanction. It is therefore possible (and likely) that differences in social status among white-collar offenders *do* exist when it comes to prison adjustment, but the subsample of inmates considered high status did not have the amount or type of resources to yield significant differences from the general prison population.

Alternatively, it could be that social status did not significantly affect the prison experience of white-collar offenders due to the small sample size for those in the offender-based category. From a prison sample of over 18,000 inmates, only 132 fit the definition of high status white-collar offenders, which necessitated drawing a random subsample of 1,090 inmates to whom they were compared. However, it is possible that any real differences between high status white-collar offenders and other inmates were obliterated because they constitute such a small

proportion, even when compared to the randomly drawn subsample. These are difficult limitations to overcome, since there is no way of examining the prison experience for high status white-collar offenders who avoid incarceration altogether, nor is there a way to increase the sample size of the subgroup of white-collar offenders in the current study. An alternate method might be to observe and compare high status white-collar criminals who received non-custodial sanctions to other offenders in terms of how they adjust to the conditions imposed by the criminal justice system.

The drawbacks of using survey data based on the responses of inmates should be also noted. While self-report data includes both detected and undetected forms of inmate misconduct and other information not included in official reports, such as inmates' perceptions toward prison officials, they are also subject to issues of memory recall and social desirability biases on the behalf of respondents (see Pare & Logan, 2011). Inmates may under report some experiences—such as those regarding victimization and treatment for mental health disorders—that might make them appear more vulnerable in the eyes of others, while over reporting more favorable experiences, such as participation in prison programs. They may also be distrustful or cynical of prison staff and may not truthfully answer questions regarding prison misconduct out of fear of being formally reprimanded. Even if inmates are truthfully reporting, they may have difficulty in accurately recalling certain events because of the time lapse between the date of their incarceration and the date the survey was administered.

Finally, the data contain no information on the behaviors and decisions of correctional staff or the official reports they file. As a result, there is no way of knowing whether differential treatment is given to white-collar offenders by prison staff, and whether this is influenced by demographic characteristics including age, race, and gender. Similar to Benson's (1985b)

observations, it might be that prison officials—like federal probation officers—view white-collar offenders as "ideal" inmates to whom they are most similar, which could impact how they treated and ultimately experience prison. Thus, future research should be based on multiple sources of information, including the accounts of inmates, prison staff, and institutional administrative data to provide a more complete picture of the prison experience for white-collar offenders.

BEYOND WHITE-COLLAR OFFENDERS: OTHER PREDICTORS OF PRISON ADJUSTMENT

While the primary focus of this study was on how white-collar offenders experience prison, the special sensitivity and special resiliency hypotheses also apply to other inmate demographics. Indeed, the findings suggest that the degree to which inmates are able to successfully assimilate to prison life is contingent on their gender, age, race, employment status, personal history, the amount of time spent in prison, and the type of institution in which they are housed.

Gender

Gender was a significant predictor of adjustment across nearly every domain of prison life, the results of which are summarized in Table 5.2. Compared to female inmates, male inmates had greater difficulty in adapting to their incarceration: They were more likely to be victimized, written up for drug and alcohol infractions, possess weapons and other illegal contraband, verbally and physically assault prison staff, and receive disciplinary action for breaking the rules. They were also less likely to participate in prison programs. However, there were some instances in which male inmates fared better than their female counterpart.

Table 5.2. Comparison of the Effects of Inmate Gender across Prison Outcomes (females are the reference category).

Prison Outcomes	Male Inmates
Victimization	
Minor	+
Serious	+
Drug and Alcohol Infraction Index	+
Property Misconduct	
Weapon	+
Other Contraband	+
Verbal/Physical Misconduct	
Staff	+
Inmate	×
Disciplinary Action Index	+
Psychological Adjustment	
Negative Affect	×
MDO Treatment Index	—
MDO Symptoms Index	—
Prison Program Participation Index	—

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

Specifically, they had reduced odds of exhibiting signs of—and receiving treatment for—mental disorders while incarcerated. These findings are also consistent with previous studies on gender-based differences within prisons (Jiang & Winfree Jr., 2006), as well as with those occurring outside of the prison walls, which show that males are at a higher risk of experiencing both violent victimization and property crimes (Kilpatrick & Acierno, 2003). In line with importation theory, it could be that established biological differences between males and females account for the observed differences in prison adjustment. Relative to females, males have higher levels of testosterone, which has been indirectly linked to criminal behavior through aggression (Wright, Tibbetts, & Daigle, 2014). Thus, male inmates may be more confrontational or aggressive toward others—including staff and other inmates—and this may increase their likelihood of victimization and prison misconduct. It could also be that the prison culture exerts pressure on male inmates to appear masculine or dominant in an otherwise chaotic environment, whereby violence and conflict are instrumental to survival (Ireland, 1999; Ireland & Ireland, 2000; Tedeschi & Felson, 1994).

Age

Similar to prior studies on the relationship between inmate age and prison adjustment, the results from the current study document an inverse relationship between age and negative prison outcomes (Cesaroni & Peterson-Badali, 2010; Ekland-Olson et al., 1983; Mackenzie, 1987; Pare & Logan, 2011; Poporino & Zamble, 1984; Wooldredge et al, 2001 Wright & Smith, 1985). As shown in Table 5.3, older inmates appeared to be more resilient to the pains of imprisonment, relative to younger inmates. They were less likely to be victimized, possess illegal contraband, engage in verbal and physical conflict with staff or other inmates, receive disciplinary action for misconduct, report feelings of negative affect, and exhibit symptoms of mental disorder. They

Table 5.3. Comparison of the Effects of Inmate Age across Prison Outcomes (younger inmates are the reference category).

Prison Outcomes	Inmate Age
Victimization	
Minor	—
Serious	—
Drug and Alcohol Infraction Index	×
Property Misconduct	
Weapon	×
Other Contraband	—
Verbal/Physical Misconduct	
Staff	—
Inmate	—
Disciplinary Action Index	—
Psychological Adjustment	
Negative Affect	—
MDO Treatment Index	+
MDO Symptoms Index	—
Prison Program Participation Index	—

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

did, however, have a higher probability of receiving treatment for mental disorders while in prison and a lower probability of participating in prison programs. As discussed in Chapter 2, younger inmates may be less mature when it comes to overcoming the difficulties associated with incarceration and thus more likely to behave in an aggressive or hostile manner toward others. They may also have to deal with problems—such as unwanted sexual advances and territorial disputes—that are of less concern to older, more established inmates (MacKenzie, 1987).

Race

Table 5.4 shows that inmate race also exhibited a significant relationship with several of the selected prison outcomes. In some instances black inmates appeared to be resilient to the more severe pains of imprisonment: They were less likely to report minor and serious victimization. They were also less likely to be written up for possessing illegal contraband and more likely to participate in prison programs. In other instances, however, they appeared to be more sensitive as they had an increased likelihood of verbally and physically confronting prison staff and other inmates, being disciplined for violating the rules, and showing signs of mental disorder.

Higher rates of misconduct toward staff and other inmates for black inmates could be the result of the historical tension existing between blacks and whites outside of the prison walls. Specifically, it is possible that rule violations are a manifestation of the resentment and hostility that black prisoners have toward whites and the prison system in general as a result of conflicting racial histories (Goldfarb, 1975). This was the conclusion drawn by Carroll (1974) after his interviews with a number of African American inmates in an eastern penitentiary, where he stated that "the prison is merely an arena within which blacks may direct aggression developed

Table 5.4. Comparison of the Effects of Inmate Race across Prison Outcomes (white inmates are the reference category).

Prison Outcomes	Inmate Age
Victimization	
Minor	—
Serious	—
Drug and Alcohol Infraction Index	×
Property Misconduct	
Weapon	×
Other Contraband	—
Verbal/Physical Misconduct	
Staff	+
Inmate	+
Disciplinary Action Index	+
Psychological Adjustment	
Negative Affect	×
MDO Treatment Index	×
MDO Symptoms Index	+
Prison Program Participation Index	+

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

through 300 years of oppression against individuals perceived to be representatives of the oppressors" (pp. 33-34). Thus, prison may serve as an appropriate venue for African-Americans and other racial minority inmate groups to exact revenge in both a physical and symbolic sense against white inmates and prison authorities (see also Fuller, Orsagh, & Raber, 1977; Struckman-Johnson & Struckman-Johnson, 2000).

Employment Status

The results in Table 5.5 show that employment status served as a buffer against a number of negative prison outcomes. Inmates who were employed before their most recent admission had reduced odds of possessing illegal substances and weaponry, coming into conflict with prison staff and other inmates, being disciplined for rule violations, reporting negative feelings, as well as showing signs of—and receiving treatment for—mental disorders. Furthermore, they had an increased likelihood of participating in prison programs. Although research in this area is underdeveloped, these findings are compatible with observations made by Flanagan (1983), who found that inmates' pre-commitment employment status was inversely related to their infraction-rate status (see also Toch & Adams, 1986; Wooldredge, 1991).

It is possible, therefore, that gainful employment before incarceration works to reduce the pains of imprisonment for inmates because it is a proxy for individuals who are otherwise prosocial and have a greater stake in conformity, despite having been incarcerated (Hirschi, 1969/2002). Compared to inmates who were unemployed before their incarceration, it may be easier for inmates with previous job experience to participate in prison programs geared towards obtaining employment since they are (presumably) more familiar with the process. Because they were employed before their incarceration, they may have higher levels of self-control than other offenders (Gottfredson & Hirschi, 1990), which may also account for their lower rates of

Table 5.5. Comparison of the Effects Inmate Employment Status across Prison Outcomes (inmates who were unemployed before their incarceration is the reference category).

Prison Outcomes	Inmate Age
Victimization	
Minor	×
Serious	×
Drug and Alcohol Infraction Index	—
Property Misconduct	
Weapon	—
Other Contraband	×
Verbal/Physical Misconduct	
Staff	—
Inmate	—
Disciplinary Action Index	—
Psychological Adjustment	
Negative Affect	—
MDO Treatment Index	—
MDO Symptoms Index	×
Prison Program Participation Index	+

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

misconduct and altercations with others and their increased participation in prison programs.

Personal History

The background characteristics of inmates—including their history with substance abuse and mental health disorder—appeared to make them more sensitive to the pains of imprisonment across nearly all domains of prison life. Table 5.6 shows that inmates reporting a history of substance abuse were more likely to be written up for drug and alcohol-related infractions and other illegal contraband, receive disciplinary action, report negative emotions, and show signs of—and receive treatment for—mental disorders. Likewise, inmates with a history of mental health disorder had increased odds of victimization, possessing weapons and other illegal contraband, arguing or fighting with staff and other inmates, being disciplined, displaying negative emotions, and showing signs of—and receiving treatment for—their mental disorders. These findings are not surprising given the breadth of research that suggests mentally-ill inmates are among the most vulnerable in the prison population (Blitz et al., 2008; Cooley, 1993; Diamond et al., 2001; Wolff et al., 2007).

It could be, as some studies have suggested, that mentally disordered inmates display more provocative behaviors, thus increasing their likelihood of victimization and misconducts, including those with staff and other inmates (Pare & Logan, 2011). Alternatively, their victimization might constitute a form of defensive violence toward individuals—including prison staff and other inmates—who are trying to control them (Felson, 1992; Silver, 2002).

Time in Prison

Consistent with past research, time in prison was positively associated with increased odds of experiencing institutional pains (Pare & Logan, 2011). As Haney (2003) pointed out,

Table 5.6. Comparison of the Effects of Inmate Personal Histories across Prison Outcomes (inmates without a history of drug and alcohol abuse and inmates without a history of mental disorder are the reference categories).

Prison Outcomes	Drug and Alcohol History	Mental Health History
Victimization		
Minor	×	+
Serious	—	+
Drug and Alcohol Infraction Index	+	×
Property Misconduct		
Weapon	×	+
Other Contraband	+	+
Verbal/Physical Misconduct		
Staff	×	+
Inmate	×	+
Disciplinary Action Index	+	+
Psychological Adjustment		
Negative Affect	+	+
MDO Treatment Index	+	+
MDO Symptoms Index	+	+
Prison Program Participation Index	+	+

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

"the longer someone remains in an institution, the greater the likelihood that process will transform them" (p. 7). Thus, Table 5.7 shows that inmates who were imprisoned for longer periods of time generally fared worse across the selected prison outcomes—with the exception of disciplinary action and participation in prison programs, where they fared better. Based on Haney's (2003) logic, both negative and positive prison experiences are likely due to an exposure effect: On the one hand, the longer inmates are incarcerated, the more probable it is that they will experience victimization, violate the rules, or come into conflict with others; on the other hand, it is plausible that longer prison sentences allow inmates to become more familiar with the system and those who are in control. Certainly, prisons are closed systems in which the staff interact with inmates on a routine basis. To the extent that a relationship has been established, correctional officers may be more likely to informally reprimand inmates for their misbehaviors instead of resorting to official disciplinary action.

Type of Institution

Finally, the type of institution in which inmates were housed influenced the degree to which they were able to adjust to their incarceration. As Table 5.8 shows, those residing in federal correctional facilities were more likely to report positive experiences, compared to those in state facilities. While no research (to the author's knowledge) has specifically examined the effects of institution type on inmate adjustment, other studies suggest that federal penitentiaries—sometimes referred to as "Club Fed" by offenders and scholars alike—are more favorable environments in which to live (Hagan & Palloni, 1986).

Table 5.7. Comparison of the Effects of Time Spent in Prison across Prison Outcomes (shorter periods of time are the reference category).

Prison Outcomes	Time in Prison
Victimization	
Minor	+
Serious	+
Drug and Alcohol Infraction Index	+
Property Misconduct	
Weapon	+
Other Contraband	+
Verbal/Physical Misconduct	
Staff	+
Inmate	+
Disciplinary Action Index	—
Psychological Adjustment	
Negative Affect	×
MDO Treatment Index	×
MDO Symptoms Index	×
Prison Program Participation Index	+

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

Table 5.8. Comparison of the effects of Institution Type across Prison Outcomes (state prisons are the reference category).

Prison Outcomes	Federal Institution
Victimization	
Minor	—
Serious	—
Drug and Alcohol Infraction Index	×
Property Misconduct	
Weapon	×
Other Contraband	—
Verbal/Physical Misconduct	
Staff	—
Inmate	—
Disciplinary Action Index	—
Psychological Adjustment	
Negative Affect	—
MDO Treatment Index	×
MDO Symptoms Index	—
Prison Program Participation Index	+

"+" or "—" represent a significant positive or negative relationship between the white-collar offender variables and prison outcomes; "×" represents a non-significant relationship between the white-collar offender variables and prison outcomes.

One potential explanation for this is that inmates sentenced to federal prisons are often convicted of non-violent crimes—such as bank robbery—whereas state prisons house inmates with more violent dispositions, including those convicted of murder, rape, and sexual assault (Bureau of Justice Statistics, 2013). Thus, inmates with are already less violent predispositions may be less likely to victimize one another and more likely to keep to themselves. It is also possible that federal institutions have greater resources and social support than state institutions, which have been shown to reduce the pains of imprisonment (Listwan, Sullivan, Agnew, Cullen, & Colvin, 2013).

CONCLUSION

The prison system was originally created for the purpose of penitence—as a place where offenders could contemplate the error of their ways, make amends with God for their sins, and rehabilitate back into society as changed persons (Beccaia, 1764). Over time, however, the philosophies of incarceration shifted toward a more punitive disposition—as a way of incapacitating and exacting retribution on those who threatened the established social order (Focault, 1977). Beyond punishment, there exist additional (though unintentional) institutional pains to which individuals are routinely subjected (Clemmer, 1940; Sykes, 1958).

As the current study shows, the extent to which they are affected by these pains depends on a number of individual-level factors—including the type of crimes they commit as well as their personal histories—which serve as proxies for who they are as people and how they behaved prior to their incarceration. With respect to white-collar offenders, the findings suggest that their social and demographic backgrounds may impact their ability to transition to prison life because they possess a number of traits—such as superior social skills and emotional regulation—that are indicative of success both outside and inside of prison. They may use this

skillset to avoid confrontations with, and sanctioning by, prison staff in favor of more productive activities, such as participating in prison programs promoting life skills and obtaining future employment.

At the same time, institutional characteristics—such as prison type—can influence how inmates experience prison because they also serve as proxies for more favorable environments in which to live. Understanding how and why different inmate groups experience prison is an important area of research, especially given the influx in the United States' prison population and the importance of evidence-based practice in creating criminal justice policy. The current study furthers the discussion in this area.

REFERENCES

Albonetti, C. A. (1998). Direct and indirect effects of case complexity, guilty pleas, and offender characteristics on sentencing for offenders convicted of a white-collar offense prior to sentencing guidelines. *Journal of Quantitative Criminology*, *14*(4), 353-378.

Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. New York, NY: WW Norton & Company.

Babiak, P., Neumann, C. S., & Hare, R. D. (2010). Corporate psychopathy: Talking the walk. *Behavioral Sciences and the Law*, *28*(2), 174-193.

Barnes, J. C., Beaver, K. M., & Boutwell, B. B. (2011). Examining the genetic underpinnings to Moffitt's developmental taxonomy: A behavioral genetic analysis. *Criminology*, *49*(4), 923-954.

Benson, M. L. (1984). The fall from grace: Loss of occupational status as consequence of conviction for a white collar crime. *Criminology, 22* (4), 573-593.

Benson, M. L. (1985a). Denying the guilty mind: Accounting for involvement in white-collar crime. *Criminology*, *23*(4), 583-607.

Benson, M. L. (1985). White collar offenders under community supervision. *Justice Quarterly*, *2*(3), 429-438.

Benson, M. L. & Cullen, F. T. (1988). The special sensitivity of white-collar offenders to prison: A critique and research agenda. *Journal of Criminal Justice, 16*(3)*,* 207-215.

Benson, M. L., & Kerley, K. R. (2000). Life course theory and white-collar crime. In H. N. Pontell & D. Shichor (Eds). *Contemporary Issues in Crime and Criminal Justice: Essays in Honor of Gilbert Geis* (pp.121-136). Saddle River, NJ: Prentice Hall.

Benson, M. L. & Moore, E. (1992). Are white-collar and common offenders the same: An empirical and theoretical critique of a recently proposed general theory of crime. *Journal of Research in Crime and Delinquency, 29*(3)*,* 251-272.

Benson, M. L. & Simpson, S. S. (2015). *White-collar crime: An opportunity perspective*. New York, NY: Routledge.

Benson, M., Kennedy, J., & Logan, M. W. (Forthcoming). Issues, challenges, and opportunities in the measurement of white-collar and corporate crime. In T.S. Bynum and B. M. Huebner (Eds.) *Handbook on Measurement in Criminology and Criminal Justice*. Hoboken, NJ: Wiley.

Biggam, F. H., & Power, K. G. (1997). Social support and psychological distress in a group of incarcerated young offenders. *International Journal of Offender Therapy and Comparative Criminology*, *41*(3), 213-230.

Blitz, C. L., Wolff, N., & Shi, J. (2008). Physical victimization in prison: The role of mental illness. *International Journal of Law and Psychiatry*, *31*(5), 385-393.

Bonta, J., & Gendreau, P. (1990). Reexamining the cruel and unusual punishment of prison life. *Law and Human Behavior*, *14*(4), 347.

Bottoms, A. E. (1999). Interpersonal violence and social order in prisons. *Crime and Justice, 26,* 205-281.

Braithwaite, J. (1985). White collar crime. *Annual Review of Sociology*, *11,* 1-25.

Camp, S. D., Gaes, G. G., Langan, N. P., & Saylor, W. G. (2003). The influence of prisons on inmate misconduct: A multilevel investigation. *Justice Quarterly*, *20*(3), 501-533.

Casey-Acevedo, K., Bakken, T., & Karle, A. (2004). Children visiting mothers in prison: The effects on mothers' behaviour and disciplinary adjustment. *Australian and New Zealand Journal of Criminology*, *37*(3), 418-430.

Carroll, L. (1974). *Hacks, blacks, and cons: Race relations in a maximum security prison*. Lexington, MA: Lexington Books.

Cesaroni, C., & Peterson-Badali, M. (2010). Understanding the adjustment of incarcerated young offenders: A Canadian example. *Youth Justice*, *10*(2), 107-125.

Clemmer, D. (1940). *The prison community.* New York, NY: Holt.

Coffee Jr., J. C. (1980). Corporate crime and punishment: A non-Chicago view of the economics of criminal sanctions. *American Criminal Law Review*, *17*, 419-478.

Cooley, D. (1993). Criminal victimization in male federal prisons. *Canadian Journal of Criminology*, *35*(4), 479-495.

Craddock, A. (1996). A comparative study of male and female prison misconduct careers. *The Prison Journal*, *76*(1), 60-80.

Cullen, F. T., Hartman, J. L., & Jonson, C. L. (2009). Bad guys: Why the public supports punishing white-collar offenders. *Crime, Law and Social Change*, *51*(1), 31-44.

Daly, K. (1989). Gender and varieties of white-collar crime. *Criminology, 27*(4)*,* 769-794.

DeLisi, M. (2003). Criminal careers behind bars. *Behavioral Sciences and the Law*, *21*(5), 653-669.

DeLisi, M., Berg, M. T., & Hochstetler, A. (2004). Gang members, career criminals and prison violence: Further specification of the importation model of inmate behavior. *Criminal Justice Studies*, *17*(4), 369-383.

Diamond, P. M., Wang, E. W., Holzer III, C. E., & Thomas, C. (2001). The prevalence of mental illness in prison. *Administration and Policy in Mental Health and Mental Health Services Research*, *29*(1), 21-40.

Edelhertz, H. (1970). *The nature, impact and prosecution of white collar crime.* Washington, DC: U.S. Department of Justice

Ekland-Olson, S., Barrick, D. M., & Cohen, L. E. (1983). Prison overcrowding and disciplinary problems: An analysis of the Texas prison system. *The Journal of Applied Behavioral Science*, *19*(2), 163-176.

Feeley, D. (2006). Personality, environment, and the causes of white-collar crime. *Law and Psychology Review*, *30*, 201-213.

Felson, M. (2002). *Crime and everyday life.* Thousand Oaks, CA: Sage Publications.

Felson, R. B. (1992). "Kick'em when they're down": Explanations of the relationship between stress and interpersonal aggression and violence. *Sociological Quarterly 33*(1), 1-16.

Felson, R. B. (1996). Big people hit little people: Sex differences in physical power and interpersonal violence. *Criminology*, *34*(3), 433-452.

Flanagan, T. J. (1983). Correlates of institutional misconduct among state prisoners. *Criminology*, *21*(1), 29-40.

Fleisher, M. S. (1989). *Warehousing violence*. Newbury Park, CA: Sage Publications.

Friedmann, P. D., Melnick, G., Jiang, L., & Hamilton, Z. (2008). Violent and disruptive behavior among drug-involved prisoners: Relationship with psychiatric symptoms. *Behavioral Sciences & the Law*, *26*(4), 389-401.

Franklin, T. W., Franklin, C. A., & Pratt, T. C. (2006). Examining the empirical relationship between prison crowding and inmate misconduct: A meta-analysis of conflicting research results. *Journal of Criminal Justice*, *34*(4), 401-412.

Fuller, D., Orsagh, T., & Raber, D. (1977). Violence and victimization within a state prison system. *Criminal Justice Review, 2*(2), 35-55.

Gaes, G. G., & McGuire, W. J. (1985). Prison violence: The contribution of crowding versus other determinants of prison assault rates. *Journal of Research in Crime and Delinquency*, *22*(1), 41-65.

Garland, D. (1996). The limits of the sovereign state: Strategies of crime control in contemporary society. *British Journal of Criminology*, *36*(4), 445-471.

Gendreau, P., Goggin, C. E., & Law, M. A. (1997). Predicting prison misconducts. *Criminal Justice and Behavior*, *24*(4), 414-431.

Geis, G. (1972). Criminal penalties for corporate criminals. *Criminal Law Bulletin*, *8,* 377-392.

Geis, G. (1996). Definition in white-collar crime scholarship: Sometimes it can matter. In J. Helkamp, R, Ball, & K. Townsend (Eds), *Definitional dilemma: Can and should there be a universal definition of white-collar crime? Proceedings of the academic workshop* (pp.159-211). Morgantown, WV: National White-Collar Crime Center.

Gover, A. R., MacKenzie, D. L., & Armstrong, G. S. (2000). Importation and deprivation explanations of juveniles' adjustment to correctional facilities. *International Journal of Offender Therapy and Comparative Criminology*, *44*(4), 450-467.

Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Garden City, NY: Aldine Transaction.

Goldfarb, R. L. (1975). *Jails: The ultimate ghetto*. Norwell, MA: Anchor Press.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.

Grant, B. F., Dawson, D. A., Stinson, F. S., Chou, S. P., Dufour, M. C., & Pickering, R. P. (2004). The 12-month prevalence and trends in DSM-IV alcohol abuse and dependence: United States, 1991–1992 and 2001–2002. *Drug and Alcohol Dependence*, *74*(3), 223-234.

Greenberg, D. F. (1985). Age, crime, and social explanation. *American of Journal Sociology 91*(1), 1-21.

Hagan, J., & Palloni, A. (1986). "Club fed" and the sentencing of white-collar offenders before and after Watergate. *Criminology*, *24*(4), 603-621.

Hagan, J., Bernstein, I. N., & Albonetti, C. (1980). The differential sentencing of white-collar offenders in ten federal district courts. *American Sociological Review, 45*(5), 802-820.

Haney, C. (2003). The psychological impact of incarceration: Implications for post-prison adjustment. *Prisoners once removed: The impact of incarceration and reentry on children, families, and communities*, 33-66.

Harer, M. D. & Steffensmeier, D. J. (1996). Race and prison violence. *Criminology, 34*(3)*,* 323-355.

Harris, J. W. (1993). Comparison of stressors among female vs. male inmates. *Journal of Offender Rehabilitation*, *19*(2), 43-56.

Hart, C. B. (1995). Gender differences in social support among inmates. *Women and Criminal Justice*, *6*(2), 67-88.

Higgins, M. (1999). Sizing up sentences. *ABA Journal*, *85*(11), 42-47.

Hirschi, T. (1969/2002). *Causes of delinquency*. Piscataway, NJ: Transaction publishers.

Hirschi, T., & Gottfredson, M. (1983). Age and the explanation of crime. *American Journal of Sociology, 89*(3)*,* 552-584.

Hirschi, T. & Gottfredson, M. (1987). Causes of white-collar crime. *Criminology, 25*(4)*,* 949-974.

Hirschi, T., & Gottfredson, M. R. (1993). Commentary: Testing the general theory of crime. *Journal of Research in Crime and Delinquency*, *30*(1), 47-54.

Innes, C. A. (1997). Patterns of misconduct in the federal prison system. *Criminal Justice Review*, *22*(2), 157-174.

Ireland, C. A., & Ireland, J. L. (2000). Descriptive analysis of the nature and extent of bullying behavior in a maximum-security prison. *Aggressive Behavior*, *26*(3), 213-223.

Ireland, J. L. (2000). "Bullying" among prisoners: A review of research. *Aggression and Violent Behavior*, *5*(2), 201-215.

Irwin, J. (1970). *The felon.* Englewood Cliffs, NJ: Prentice Hall.

Irwin, J. & Cressey, D. (1962). Thieves, convicts, and the inmate culture. *Social Problems, 10*(2)*,*142-155.

Jacobs, J. B. (1982). Sentencing by prison personnel: Good time. *UCLA Law Review*, *30*, 217-269.

Jiang, S., & Winfree Jr., L. T. (2006). Social support, gender, and inmate adjustment to prison life insights from a national sample. *The Prison Journal*, *86*(1), 32-55.

Kadish, S. H. (1963). Some observations on the use of criminal sanctions in enforcing economic regulations. *The University of Chicago Law Review*, *30*(3), 423-449.

Kerley, K. R., Copes, H., Tewksbury, R., & Dabney, D. A. (2010). Examining the relationship between religiosity and self-control as predictors of prison deviance. *International Journal of Offender Therapy and Comparative Criminology*, *55*(8), 1-21.

Kilpatrick, D. G., & Acierno, R. (2003). Mental health needs of crime victims: Epidemiology and outcomes. *Journal of Traumatic Stress*, *16*(2), 119-132.

Kruttschnitt, C., Gartner, R., & Miller, A. (2000). Doing her own time? Women's responses to prison in the context of the old and the new penology. *Criminology*, *38*(3), 681-718.

Lahm, K. F. (2008). Inmate-On-Inmate Assault A Multilevel Examination of Prison Violence. *Criminal Justice and Behavior*, *35*(1), 120-137.

Lawson, D. P., Segrin, C., & Ward, T. D. (1996). The relationship between prisonization and social skills among prison inmates. *The Prison Journal*, *76*(3), 293-309.

Listwan, S. J., Sullivan, C. J., Agnew, R., Cullen, F. T., & Colvin, M. (2013). The pains of imprisonment revisited: The impact of strain on inmate recidivism. *Justice Quarterly*, *30*(1), 144-168.

Mann, K., Wheeler, S., & Sarat, A. (1979). Sentencing the white-collar offender. *American Criminal Law Review*, *17*, 479-500.

MacKenzie, D. L. (1987). Age and adjustment to prison interactions with attitudes and anxiety. *Criminal Justice and Behavior*, *14*(4), 427-447.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, *100*(4), 674.

Nagin, D. S., Farrington, D. P., & Moffitt, T. E. (1995). Life-course trajectories of different types of offenders. *Criminology*, *33*(1), 111-139.

Nagin, D. S., & Paternoster, R. (1991). On the relationship of past to future participation in delinquency. *Criminology*, *29*(2), 163-189.

Owen, B. A. (1998). *In the mix: Struggle and survival in a women's prison*. Albany, NY: SUNY Press.

Pare, P. & Logan, M. (2011). Risks of minor and serious victimization in prison: The impact of inmates' mental disorders, physical disabilities, and physical size. *Society and Mental Health, 1*(2)*,* 106-123.

Parisi, N. (1982). *Coping with imprisonment*. Thousand Oaks, CA: Sage Publications.

Payne, B. K. (2003). *Incarcerating white-collar offenders: The prison experience and beyond*. Springfield, IL: Charles C. Thomas Publisher Ltd.

Perri, F. S. (2011). White-collar criminals: The 'kinder, gentler' offender? *Journal of Investigative Psychology and Offender Profiling*, *8*(3), 217-241.

Pollack, H., & Smith, A. B. (1983). White-collar v. street crime sentencing disparity: How judges see the problem. *Judicature, 67,* 175-82.

Pollock, J. M. (2002). *Women, crime, and prison*. Belmont, CA: Wadsworth.

Poole, E. D., & Regoli, R. M. (1983). Professionalism, role conflict, work alienation, and anomia: A look at prison management. *The Social Science Journal*, *20*(1), 63-70.

Porporino, F. J. & Zamble, E. (1984). Coping with imprisonment. *Canadian Journal of Criminology and Criminal Justice, 26,* 403-421.

Posner, R. A. (1979). Optimal sentences for white-collar criminals. *American Criminal Law Review, 17*, 409-418.

Pyrooz, D., Decker, S., & Fleisher, M. (2011). From the street to the prison, from the prison to the street: understanding and responding to prison gangs. *Journal of Aggression, Conflict and Peace Research*, *3*(1), 12-24.

Ragatz, L. L., Fremouw, W., & Baker, E. (2012). The psychological profile of white-collar offenders demographics, criminal thinking, psychopathic traits, and psychopathology. *Criminal Justice and Behavior*, *39*(7), 978-997.

Reardon, S. F., Yun, J. T., & Eitle, T. M. (2000). The changing structure of school segregation: measurement and evidence of multiracial metropolitan-area school segregation, 1989–1995. *Demography*, *37*(3), 351-364.

Reardon, S. F., & Firebaugh, G. (2002). Measures of multigroup segregation. *Sociological Methodology*, *32*(1), 33-67.

Renfrew, C. B. (1977). The paper label sentences: An evaluation. *Yale Law Journal, 86*(4)*,* 590-618.

Ruback, R. B., & Innes, C. A. (1988). The relevance and irrelevance of psychological research: The example of prison crowding. *American Psychologist*, *43*(9), 683-693.

Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology, 94*(4)*,* 774-802.

Sampson, R. J., & Bartusch, D. J. (1998). Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. *Law and Society Review*, *32*(4) 777-804.

Sappington, A. A. (1996). Relationships among prison adjustment, beliefs, and cognitive coping style. *International Journal of Offender Therapy and Comparative Criminology, 40*(1)*,* 54-62.

Savelsberg, J. J. (1994). Knowledge, domination, and criminal punishment. *The American Journal of Sociology*, *99*(4), 911-943.

Shapiro, S. P. (1990). Collaring the crime, not the criminal: Reconsidering the concept of white-collar crime. *American Sociological Review, 55*(3)*,* 346-365.

Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. Chicago, IL: University of Chicago Press.

Silver, E. (2002). Mental disorder and violent victimization: The mediating role of involvement in conflicted social relationships. *Criminology*, *40*(1), 191-212.

Simon, J. (2001). Entitlement to cruelty: Neo-liberalism and the punitive mentality in the United States. In K. Stenson and R. Sullivan (Eds), *Crime Risk and Justice: The politics of crime control in liberal democracies* (pp. 125–143). Cullompton, UK: Willan Publishing.

Stadler, W. A., & Benson, M. L. (2012). Revisiting the guilty mind: The neutralization of white-collar crime. *Criminal Justice Review*, *37*(4), 494-511.

Stadler, W. A., Benson, M. L., & Cullen, F. T. (2013). Revisiting the special sensitivity hypothesis: The prison experience of white-collar inmates. *Justice Quarterly*, *30*(6), 1090-1114.

Steiner, B., & Wooldredge, J. (2009a). Rethinking the link between institutional crowding and inmate misconduct. *The Prison Journal, 89*(2), 205-233.

Steiner, B., & Wooldredge, J. (2009b). The relevance of inmate race/ethnicity versus population composition for understanding prison rule violations. *Punishment and Society*, *11*, 459-489.

Stotland, E. (1977). White collar criminals. *Journal of Social Issues*, *33*(4), 179-196.

Struckman-Johnson, C., & Struckman-Johnson, D. (2000). Sexual coercion rates in seven Midwestern prison facilities for men. *The Prison Journal*, *80*(4), 379-390.

Sutherland, E. H. (1983). *White-collar crime: The uncut version.* New Haven, CT: Yale University Press. (Original work published in 1949).

Sykes, G. M. (1958). *The society of captives.* Princeton, NJ: Princeton University Press.

Tappan, P. W. (1947). Who is the criminal? *American Sociological Review, 12*(1)*,* 96-102.

Tasca, M., Griffin, M. L., & Rodriguez, N. (2010). The effect of importation and deprivation factors on violent misconduct: An examination of black and Latino youth in prison. *Youth Violence and Juvenile Justice, 8*(3)*,* 234-249.

Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*. Washington, DC: American Psychological Association.

Thomas, C. (1970). Toward a more inclusive model of inmate contraculture. *Criminology, 8*(3)*,* 251-262.

Thomas, C. (1977). Theoretical perspectives on prisonization: A comparison of the importation and deprivation models. *Journal of Criminal Law and Criminology, 68*(1)*,* 135-145.

Thomas, C. & Foster, S. (1972). Prisonization in the inmate contraculture. *Social Problems, 20*(2)*,* 229-239.

Thomas, C., Peterson, D., & Zingraff, R. (1978). Structural and social correlates of prisonization. *Criminology, 16*(3)*,* 383-393.

Toch, H. (1977). *Living in prison: The ecology of survival.* New York, NY: Free Press.

Toch, H., & Adams, K. (1986). Pathology and disruptiveness among prison inmates. *Journal of Research in Crime and Delinquency*, *23*(1), 7-21.

Trulson, C. R. (2007). Determinants of disruption: Institutional misconduct among state-committed delinquents. *Youth Violence and Juvenile Justice, 5*(1)*,* 7–34.

Trulson, C. R., Marquart, J. W., & Kawucha, S. K. (2006). Gang suppression and institutional control. *Corrections Today, 68*(2)*,* 26–31.

Unnever, J. D., Benson, M. L., & Cullen, F. T. (2008). Public support for getting tough on corporate crime: racial and political divides. *Journal of Research in Crime and Delinquency*, *45*(2), 163-190.

United States Department of Justice. (2013). *Correctional populations in the United States, 2013.* Washington, DC: Bureau of Justice Statistics.

United States Sentencing Commission. (1998). *Sourcebook of federal sentencing statistics* (USSCFY98). Washington, DC: Bureau of Justice Statistics.

United States Sentencing Commission. (2003a). *Sourcebook of federal sentencing statistics* (USSCFY03). Washington, DC: Bureau of Justice Statistics.

United States Sentencing Commission. (2003b). *Sentencing commission toughens penalties for white collar fraudsters: Agency also boosts penalties for cybercrime and manslaughter*. Washington, DC: Bureau of Justice Statistics.

United States Sentencing Commission. (2008). *Sourcebook of federal sentencing statistics* (USSCFY08). Washington, DC: Bureau of Justice Statistics.

United States Sentencing Commission. (2013). *Sourcebook of federal sentencing statistics* (USSCFY13). Washington, DC: Bureau of Justice Statistics.

Wacquant, L. (2001). Deadly symbiosis: When ghetto and prison meet and mesh. *Punishment and Society, 3*(1)*,* 95-134.

Weisburd, D., & Waring, E. (2001). *White-collar crime and criminal careers*. New York, NY: Cambridge University Press.

Weisburd, D., Wheeler, S., Waring, E., & Bode, N. (1991). *Crimes of the middle classes: White-collar offenders in the federal courts.* New Haven, CT: Yale University Press.

Wheeler, S., Weisburd, D., Waring, E., & Bode, N. (1988a).White collar crime and criminals. *American Law Review, 25,* 331-337.

Wheeler, S., Mann, K., & Sarat. (1988b). *Sitting in judgment: The sentencing of white-collar criminals.* New Haven, CT: Yale University Press.

Wilson, W. J. (2012). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago, IL: University of Chicago Press.

Witte, A. D., & Tauchen, H. (1994). *Work and crime: An exploration using panel data*. Cambridge, MA: National Bureau of Economic Research.

Wolff, N., Blitz, C. L., & Shi, J. (2007). Rates of sexual victimization in prison for inmates with and without mental disorders. *Psychiatric Services, 58*(8)*,* 1087-1094.

Wooldredge, J. D. (1991). Correlates of deviant behavior among inmates of US correctional facilities. *Journal of Crime and Justice*, *14*(1), 1-25.

Wooldredge, J. D. (1994). Inmate crime and victimization in a southwestern correctional facility. *Journal of Criminal Justice*, *22*(4), 367-381.

Wooldredge, J. D. (1997). Explaining variation in perceptions of inmate crowding. *The Prison Journal*, *77*(1), 27-40.

Wooldredge, J. D. (1998). Inmate lifestyles and opportunities for victimization. *Journal of Research in Crime and Delinquency*, *35*(4), 480-502.

Wooldredge, J. D. (1999). Inmate experiences and psychological well-being. *Criminal Justice and Behavior, 26*(2)*,* 235-250.

Wooldredge, J. (2002). Keeping pace with evolving prison populations for effective management. *Criminology and Public Policy*, *2*(2), 253.

Wooldredge, J., Griffin, T., & Pratt, T. (2001). Considering hierarchical models for research on

inmate behavior: Predicting misconduct with multilevel data. *Justice Quarterly*, *18*(1), 203-231.

Worrall, J. L., & Morris, R. G. (2011). Inmate custody levels and prison rule violations. *The Prison Journal*, *91*(2), 131-157.

Wright, J. P., Tibbetts, S. G., & Daigle, L. E. (2014). *Criminals in the making: Criminality across the life course*. Thousand Oaks, CA: Sage Publications.

Wright, K. N. (1989). Race and economic marginality in explaining prison adjustment. *Journal of Research in Crime and Delinquency*, *26*(1), 67-89.

Wright, K. N. (1993). Prison environment and behavioral outcomes. *Journal of Offender Rehabilitation*, *20*(2), 93-114.

Wright, K. N. (1985). The violent and victimized in the male prison. *Journal of Offender Rehabilitation*, *16*(4), 1-26.

Zingraff, M. T. (1980). Inmate assimilation: A comparison of male and female delinquents. *Criminal Justice and Behavior*, *7*(3), 275-292.